

Academic Advising, Eh: A Profile of Undergraduate Academic Advising
at Ontario Universities

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Abstract

Despite its importance to postsecondary students' success, there is little known about academic advisement in Canada. Academic advising can be a very intensive and demanding job, yet it is not well understood what duties or student populations of advising make it so. On a practical level, this study sought to learn more about academic advisement in Ontario universities and provide a general overview of who advisors are and what they do. This study also investigated academic advising duties and time allocation for these responsibilities in an attempt to relate theory to practice incorporating Vilfredo Pareto's theoretical underpinnings to confirm or negate the applicability of the Pareto Principle in relationship to time utilization by advisors. Essentially this study sought to discover which students require the greatest advisement time and effort, and how advisors could apply these findings to their work.

Academic advising professionals in Ontario universities were asked to complete a researcher-designed electronic survey. Quantitative data from the responses were analyzed to describe generalized features of academic advising at Ontario universities. Discussion and implications for practice will prompt advisors and institutions using the results of this study to measure themselves against a provincial assessment. Advisors' awareness of time allocation to different student groups can help focus attention where new strategies are needed to maximize time and efforts. This study found that caseload and time spent with student populations were proportional. Regular undergraduate students accounted for the greatest amount of caseload and time followed by working with students struggling academically. This study highlights the need for further evaluation, education, and research in academic advising in Canadian higher education.

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CHAPTER ONE: INTRODUCTION

From recruitment to alumni relations and everything in between, academic advisors are an integral component to the success of university students today. It has been noted that academic advisement “may be the single most underestimated characteristic of a successful [university] experience” (Light, 2001, p. 81). Despite its importance, there is little known about academic advisement in Canada. Even a question that appears simple in nature such as “what does an academic advisor do” is complex. Job duties within this profession vary from institution to institution and significant differences can be found even within a single institution. Academic advising can be a very intensive and demanding job, yet it is not well understood what duties or student populations of advising make it so.

The people who work as academic advisors are just as varied as the tasks they fulfill. For this thesis, an academic advisor will be defined as a “representative giving insight or direction to a university student about an academic, social or personal matter” (Kuhn, 2008, p. 3). The services of academic advisors include, but are not limited to, helping students select courses, become familiar with degree requirements and institutional policies, and achieve overall academic and life goals. This thesis will be guided by a selection of McGillin’s (2000) recommendations for expanding the scholarship of research in academic advising through clarifying what advising is, studying what advisors do, and conducting research on advisors not just advisees.

This study will serve dual purposes, both practical and scholarly. Recent academic database searches reveal no published best practices that address the people or practices of academic advisement in Ontario universities. On a practical level, this study

will develop a profile of academic advising in Ontario that advisors can use as a benchmark. On a scholarly level, this research will incorporate Vilfredo Pareto's theoretical underpinnings to test whether advisors' time use follows the Pareto Principle, which generally proposes that a small portion of the population accounts for a large proportion of the effect (Lipovetsky, 2009). In the context of advisement, this is a question of which students require the greatest advisement time and effort, and how advisors should best implement their work.

An electronic quantitative descriptive survey was designed to gather information about advisors, their institutions, and their practices including allocation of time. Analysis of the results revealed interesting aspects that are further discussed in the final chapter including future research, implications for practice, and conclusions. This chapter addresses the statement of the problem, purpose of the research, research questions, potential limitations, and the significance of this research.

Statement of the Problem

To date, little has been written about academic advisement professionals and practices in Canada. This study was designed to help fill the gap in knowledge that exists about academic advising in publicly funded Ontario universities. This research focuses on building a knowledge base about academic advisors and their practices. Without developing this point of reference, it will be difficult to gain recognition and value for the profession essential to advance the field.

Purpose of this Research

The purpose of this research is to learn more about academic advisement in Ontario universities. This research provides a general overview of who advisors are and

what they do. Professionals in the field can use the data from this research as a benchmark for academic advising in Ontario. This benchmark will give academic advisors the opportunity to see the similarities and differences between themselves and their colleagues in their practices. This study also investigates academic advising duties and time allocation for these responsibilities in an attempt to relate theory to practice.

Research Questions

Academic advising professionals were asked to complete a researcher-designed survey that encompasses three areas: demographic information, institutional structures, and key advising responsibilities and issues. The three research questions are as follows:

1. Who are academic advisors at Ontario universities?
2. How do Ontario universities structure the work of academic advisors?
3. How do academic advisors apportion their time across student populations?

Delimiting the Research

Research focusing on academic advising in Canada has been minimal, leaving a multitude of research options available to study. Much of the research about academic advising is based in the United States; as a result, publications and conferences present issues that differ from those that seem to be prevalent in Ontario universities. Topics such as privately funded universities, efforts to cater to student athletes, and racially segregated universities are common in the U.S., but are not primary issues that Ontario advisors face. This realization prompted my interest in researching what issues are paramount in advising in Ontario universities.

I undertook initial informal research about the academic advising system, advisement responsibilities, and advisement practices at one small Ontario university.

Members of this one advising team found the resulting information useful. This positive response led me to develop this more formal and scholarly study to investigate the experiences of academic advisors from across the province. Initially, I considered making this research nationwide for university academic advisement but that plan was not realistic due to resources and magnitude. It is my hope that this study can be replicated by a representative from each province and territory to produce a nationwide profile over time.

Beyond selecting a specific province to pursue the current research, I also felt that it was important to focus on undergraduate university education. There are differences in the core advising focus for advisors engaged at different levels in the postsecondary sector. College advisors may field numerous apprenticeship questions while graduate program advisors may assist students with research grant applications; these are just a few examples of areas that have limited applicability to undergraduate advising in universities. There is a “great deal of evidence that shows university graduates benefit substantially from their education through better jobs, higher earnings, and less time unemployed” (Beach, Boadway, & McInnis, 2005, p. 4). Undergraduate university education is also essential for those pursuing postgraduate work.

I have been an undergraduate academic advisor at an Ontario university for five years. This raises the possibility that my researcher’s bias on the subject matter may influence the direction of this research. I admit that I have a vested interest in this research topic since potential improvements to advising are central to my work as an academic advisor. At the same time, my experience as an advisor provides an important

insider perspective on the nature of advising that should help me to ask the right questions in this research.

Significance of the Study

This study has the potential to make a real impact on the profession of academic advising in Ontario in a variety of ways. This research can begin to fill a void that exists in the literature regarding academic advising in Canada. It gives a voice to a population that is not often found in literature regarding academic advising. The current research is dominated by U.S. research, based on U.S. universities, which typically have a different structure and more established systems of advising and, therefore, different research objectives than Canadian universities. The published literature seldom addresses Canadian advising needs. Having research that focuses on Canadian issues may differentiate practices emphasizing the nuances of Canadian advising.

In addition to advancing Canadian knowledge on the subject matter, this research will also advance theoretical concepts. It will expand scholarly endeavours by applying Pareto's Principle to academic advising. To my knowledge, no empirical data have been collected to test Pareto's Principle in the context of academic advising. The implications of discovering that the majority of advising tasks are rooted in a small minority of the advising student population could allow advisors to better target groups that are experiencing difficulties and seek to find more directed solutions for specific student populations.

Since academic advising is not well recognized in Ontario, this study will allow readers to better understand what advisors do and what constraints they face with an ever-changing student population. By highlighting the work of academic advisors in publicly

funded Ontario universities, this study serves to strengthen the profession as a whole and increase awareness among its members.

From an academic advisor standpoint, it is helpful to have a benchmark to guide personal and institutional approaches. By bringing to light challenges advisors face and responsibilities typically undertaken, this research may create solidarity among professionals that serve in the field. It is possible that it will open up opportunities for further collaboration between institutions. In addition, this research may reveal certain practices that are common and effective, and other practices that are ineffective that, if remedied, could improve the system. I hope that this study will encourage others to further advance research in this field, especially Canadian research.

Summary

This chapter has provided an overview of the statement of the problem, purpose of this research, three research questions, limits of the research, and significance of this study. In the next chapter, an overview of relevant literature is presented that includes literature about academic advisement, university students, higher education in Ontario, and Pareto's Principle. Chapter Three details the design, participants, implementation, ethical considerations, and data analysis for this study. Chapter Four focuses on results using frequencies, Spearman and Pearson correlations, and chi square tests to analyze the questionnaire results. Chapter Five delves into more in-depth understanding of the results through discussion, provides implications for practice, presents future research recommendations, and draws conclusions.

CHAPTER TWO: LITERATURE REVIEW

In this chapter, I review literature in four overarching branches including academic advising, university students, the landscape of the Ontario university system, and theoretical background, as they relate to the research questions addressed in Chapter One. In branch one, the review of literature begins with the historical roots of advising in North America. After providing the historical foundations of the profession, paramount models and types of advising are examined to enhance readers' understandings of the common systems of advising. This thesis focuses primarily on advising by non-academic staff; however, additional consideration is made for advising by faculty members, so as not to exclude this important population. A brief exploration will be presented on the importance of advising and the lack of professionalization in the field. Branch one concludes with the reality of high workloads for advisors, the job satisfaction of advisors, and the level of satisfaction students have with their Ontario advisors.

In branch two, the focus shifts to give a brief profile of Ontario university students. The impact of generational characteristics of students on today's university system is also addressed. The diversity of university students will be included by examining a variety of special student populations, tying in statistics and literature from Ontario universities where available. Branch three explores the educational landscape of Ontario universities, focusing on the current state of universities in Ontario, fluctuations in enrollment and funding issues, and a prominent provincial report (Rae, 2005).

Lastly, branch four presents a brief review of Pareto's Principle, which provides the theoretical basis for this thesis. Does the principle hold true; that is, do a few students dominate academic advisors' time?

Academic Advising

It is commonly acknowledged that an understanding of the past is fundamental to an understanding of the present, and so, an overview of the history of academic advising has been provided. In addition, the founding types of advising are addressed as well as common organizational advising models, including faculty advising. It should be noted that no one type or model is correct for every institution; different institutions employ different methods based on their specific needs. The importance of academic advising is briefly reviewed and the conflicting lack of professionalization in the field is explored. Advisors' workload, student-to-advisor ratios, advisors' employment satisfaction, and levels of student satisfaction with Ontario advisors are covered in this section.

History of Academic Advising

The roots of academic advising in Canada have been largely unexamined. As such, an assumption has been made that much of the Canadian advising systems are based on the assimilation of international processes. Frost (2000) dates academic advising back to 1636 at Harvard College when academic advising was managed through Harvard's president and to a lesser degree its faculty; they were responsible for advising students regarding extracurricular activities, their moral life, and intellectual habits. Nidiffer (2000) remarked that the time period from 1832-1892 was the advent of non-academic positions devoted to advising. These positions were initially limited to women who supervised the college life of women, providing counsel, offering moral guidance, and ensuring living conditions were appropriate. Even 100 years later, the majority of women continue to work in occupations that have been historically gendered such as teaching, service-related, clerical, or other administrative positions. Brubacher and Rudy

(1976) detailed the transformation of advising occurring when the elective system was expanded and Harvard's president appointed a dean responsible for administering student discipline and assisting students with elective choices appropriate for their career goals. Frost (2000) commented on the increasing popularity of faculty advising, group advising, freshman seminars, and deans of students over the late 1800s.

In the early 1900s, many professionals were hired to advise and this created a gap between the faculty and students and the faculty and professionals, especially in larger universities (Veysey, 1965). After World War I, copious numbers of services began to appear and became more individualized. More varied curricula spawned an advising system that was divided between academic, vocational, and personal counselling and faculty alone were no longer responsible for advising (Rudolph, 1962). Increased funding and open admissions in the 1970s sparked the growth of non-traditional student populations (Gordon, 1998). With increased enrollments, scholarly demands on faculty, and growing student needs, a dramatic need for alternative advising services emerged and a shift occurred to professional advising. A connection between student development and academic advising began to emerge in the early 1970s. Increasing attrition rates and growing awareness of the importance of student retention led to the development of more extensive advising services.

The National Academic Advising Association (NACADA) evolved from the first National Conference on Academic Advising in 1977 and was chartered in 1979. It is guided by the same purpose today as it was 30 years ago: "to promote the quality of Academic Advising in institutions of higher education to enhance the educational development of students" (Beatty, 1991, p. 5). Although NACADA is based in the U.S.,

it continues to grow and flourish internationally, including members in Canada.

NACADA also has a Canadian interest group to address issues affecting Canadian advisors and to further develop networks between universities.

In recent years, a separate entity developed with an ad hoc steering committee to address Ontario advising needs. Their mission is to “positively impact the educational experience of post secondary students in Ontario through the research, development, and promotion of quality professional development and networking opportunities for academic advising professionals” (Mission Statement, 2009, ¶1). They currently distribute newsletters and assist in the organization of annual conferences at Ontario postsecondary institutions.

Common Advising Types and Models

Two founding types of advising are developmental and prescriptive advising. Developmental advising is a student-centred process that views students holistically. O’Banion (1972) and Crookston (1972) refer to developmental advising as encompassing life, career, and educational goals; acknowledging individuality; and giving students opportunities to problem solve and make their own decisions. Prescriptive advising, in contrast, has been characterized as dispensing information and being authority based. Winston and Sandor (1984) emphasize that in prescriptive advising the primary responsibility is on the advisor who is the one who has the information and the one who makes decisions, telling the students what to do. Once the information is given by the advisor, it is the responsibility of the student to adhere to and fulfill what was prescribed.

Between developmental and prescriptive methods, there is no right or wrong advising type. Some advisors are faithful to one approach whereas others use whichever

approach is appropriate based on the situation. Prescriptive structures can be quite beneficial for students whose culture stresses hierarchical patterns of authority and deference to authority (Brown & Rivas, 1994, as cited in Appleby, 2008). Prescriptive advising is more of a traditional and methodical approach, whereas the developmental approach is a more fluid approach that incorporates student development theory. Hendey (1999) cites “there is nearly a universal agreement that academic advising should be developmental” (§ 1). Developmental structures can be seen as more caring and holistic and therefore may be more widely accepted than prescriptive advising.

There are three commonly noted organizational models of advising: decentralized, centralized, and shared models. Pardee (2004) classifies decentralized models as advising services provided by faculty and staff in their academic departments. Centralized models occur when all advising is handled by an administrative unit typically in one location. Shared models include a combination of a central advising unit with additional faculty or staff in academic departments.

Results from the Sixth National Survey on Academic Advising conducted in 2003 by the American College Test (ACT) found that 55% of U.S. institutions use a shared model of delivering advising services, 32% use a centralized model, and only 14% of institutions use a decentralized system (Habley, 2004, as cited in Pardee, 2004). One model may not suffice for the whole institution and it is not uncommon to see different models within one institution. When deciding on a model for an institution, there are multiple variables that should be taken into consideration, including “characteristics of the institution, the faculty, student population, scope of the advising program, and philosophy of advising” (Pardee, 2004, § 10). In an ever-changing educational climate,

re-assessment of current models may also need to take place and be adjusted for the needs of students and institutions.

Faculty-only models are a subsection of decentralized advising. In this model, students are assigned a faculty advisor. Due to faculty expertise in the discipline, this model can be particularly effective for discipline-specific information and understanding course content and curriculum (Gordon & Habley, 2000). The faculty-only advising model has been in decline in recent years with an upward trend towards a shared model that favours both professional and faculty advising available to students (King, 2008). Both formal and informal faculty-student contact has been cited as critical for student satisfaction, learning, and retention (Pascarella & Terenzini, 1991). Fairweather (1993, 1996, as cited in Barnes & Austin, 2009) found that faculty reward systems influence how much time faculty advisors are willing and able to devote to their advising. Pardee (2004) acknowledged that faculty-only advising structures can be cost effective, as no additional space or funding is needed. Common concerns appear to be limited accessibility of faculty due to rigorous teaching and research demands and lack of training in personal student development or social aspects that may affect students.

Importance and Professionalization of Academic Advising

Academic advisors play a critical role in the success of university students. Academic advisors are often the only link a student has with the institution, having a profound effect on the student's academic career and the student's level of satisfaction with the university (Nutt, 2000). It has also been found that variables such as academic advising and study habits directly affected GPA for "non-traditional" students (Bean & Metzger, 1985, as cited by Collier & Morgan, 2008). Pascarella and Terenzini (2005)

show that advising is actively beneficial to students' attainment. Academic advising has been documented to have an effect on student retention, which ensures academic and financial stability of institutions. Tuttle (2000) concedes that as a result of the positive relationship between advising and student retention, most institutions have approved the expansion of academic advising services.

Non-academic staff that have no teaching responsibilities are referred to as professional advisors. These are individuals "hired to focus primarily on academic advising activities that promote the academic success of students, with additional attention to general student development at the institution" (Self, 2008, p. 268). Some common challenges for professional advisors are lack of professional training and development, difficulty describing their roles and responsibilities, and a lack of career progression.

Training and professional development appear to be sparse in the academic advising profession. Only 23% of academic departments across all postsecondary institution types in the U.S. required formal training for academic advisors (Gordon & Habley, 2000). In the U.S., there are a few graduate certificates and master's degree programs tailored to the academic advising field (Self, 2008). To my knowledge, there are no such certificates or degree programs in Canada to train people to be academic advisors or promote research production in this field. "The absence of consistent and systematic training weakens the quality and effectiveness of academic advising...it also contributes to misperceptions about advising and serves to undermine the state of advising" (Brown, 2008, p. 310). Lack of training could also play a part in the lack of professionalization of the field.

There have been significant achievements in attempts to professionalize and establish the field of academic advising as a recognized field of inquiry. Habley (2009) heralds increasing numbers of journal articles and documents regarding academic advising; the Education Resources Information Centre's (ERIC) inclusion of "academic advising" as a search descriptor; graduate programs in academic advising; graduate dissertations and theses about advising; and the advent of NACADA journals, conferences, grants, and scholarships as contributing to the visibility of academic advising in higher education. The expansion of graduate programs in advising, increased outreach efforts with faculty, and continuous development of quality research to support the field of academic advising is needed to enhance its current status and propel the field further. "Academic advising was adopted as a method to meet immediate and practical needs" (Schulenberg & Lindhorst, 2008, p. 47). Over time, theories have developed and a greater understanding of the impact of advising has been discovered, but the recognition of advising as a valid field of inquiry has yet to be embraced. Academic advising has emerged as a distinctive path within higher education and is seen as an interdisciplinary field but still lacks the fundamental recognition of a professionalized status.

Workload and Satisfaction

It is not uncommon for academic advisors to feel overwhelmed with the workload or variety of tasks they have to complete with limited time and resources. "Academic advisors, in general, are often overworked and underpaid. With little or insufficient information, they are burdened with the task of making hundreds of decisions and suggestions each quarter" (Whitner & Myers, 1986, p. 664). The dedication of many

advisors to ensure excellent service paired with reductions in budgets is leaving advisors in very unbalanced positions.

The research literature does not typically quantify what student-to-advisor ratios are or should be. Habley (2004) reports that experts in the field of academic advising are reluctant to provide specific ratios because “many institutional factors should be considered in determining a reasonable advisor load,” yet “off the record” these experts might suggest “that a target advisor load for full-time advisors should be about 300/1” (¶ 4). Results drawn from the 2003 American College Testing (ACT) revealed the average ratios for four-year public institutions in the U.S. was 285/1 for professional advisors and 38/1 for faculty advisors. Advisors working with students with more extensive advising needs (e.g., first-year, transfer, adult, international, and students with disabilities) should have fewer advisees (Habley, 2004).

A 2005 NACADA survey on advisor satisfaction of over 1,900 members revealed that 48% of respondents generally agreed that they were happy with the amount of teamwork involved in their work. Over 50% of respondents agreed with the statement, “overall, I am satisfied with my job.” The question “what could be done to make your job more satisfying” had numerous responses, overwhelmingly more money was the most common response but less paperwork, and lower student-to-advisor ratios also appeared frequently (Donnelly, 2009).

The assessment of academic advisement and academic advisors has received scarce attention in the literature (Gordon & Habley, 2000). Therefore, it is a challenge to examine the effectiveness of advisement services and to learn and grow from assessments. Since 1979, the American College Testing (ACT) has incorporated a key

measure of academic advising through the National Academic Advising Survey in the U.S. It focuses on the delivery of advising services across various institutions (Tuttle, 2000). No such measure exists for advising in Canada. The National Survey of Student Engagement (NSSE), which is disseminated to first- and fourth-year students at Canadian institutions to track student engagement and satisfaction, includes one question regarding the overall quality of academic advising at the institution. The combined results for Ontario universities in 2008 revealed 48% of first-year students felt that the overall quality of academic advising at their institution was good (NSSE, 2008). Similarly, 43% of fourth-year students ranked the quality of overall advising as good. These results reveal promising accounts of the current academic advising system, but also show that there could be improvements made to the system to increase satisfaction with current services.

University Students

University students are a diverse and dynamic population; therefore, a brief overview of the makeup of current Ontario university students will be given. Generational aspects of traditionally aged university students are addressed, including characteristics, issues, and their relationship to individuals that are of a different generation such as faculty. As well, I consider the characteristics and needs of designated “special student populations.”

Profile of Ontario University Students

Admissions to publicly funded Ontario universities are nondiscriminatory and endeavour to avoid bias against race, faith, class, gender, or disability. Students in Ontario are typically 18 years of age when they enter into university undergraduate

programs, although increasingly, mature students and transfer students are contributing to increased ages of students entering into undergraduate programs (Kasworm, 2010). There are a variety of paths that students take to enter into Ontario universities. A study of Canadian universities concluded that “70 per cent of incoming students moved directly into university after high school graduation” (O’Heron, 1997, p. 2). Most university admissions are directly related to grades earned in high school. Other avenues for entry into universities include entry after time away from secondary school graduation, colleges, and international student admissions.

Generational Effects

While generational stereotypes do not fit everyone, it is useful to identify overall trends occurring in the traditional university-aged cohort. Generation Y, Millenials, Generation Next, or the Net Generation are all terms for the demographic cohort born around 1982 to 2003 (Keeling, 2003). McGlynn (2005) addressed that this generational cohort has been linked to the birth of the World Wide Web and as such students in this cohort have never lived in a world without the internet and are extremely technologically savvy. Some of the major characteristics of this generation include being diverse, group oriented, multi-taskers, and demanding. They are a particularly protected population and are known for growing up in highly scheduled and sheltered environments where parents tend to indulge them and make decisions for them.

Academically, this generation has been characterized as smart but lazy. This cohort seeks immediate gratification, and expectations for customer service are high. These students “want to learn, but they want to learn only what they have to learn, and they want to learn it in a style that is best for them” (Carlson, 2005, p. A36). This

generation has been described as having a strong sense of entitlement and often takes little responsibility for their own learning (Sharpe, 2005). Some common concerns arise from educating this population because they have a “range of non-academic employment and domestic commitments, learning and physical disabilities, differences in learning styles and second language limitations” (Sharpe, p. 2). Increasing accessibility to postsecondary education changes the generational dynamic. For example, growing acceptance for students with all types of disabilities changes the processes of the institution and faculty now need to make accommodations that in the past would not have been considered.

Professors and students are from different generations and, therefore, have different ways of learning and communicating. Fogg (2009) reveals that the convergence of these different generations can create serious culture clashes. Often, professors are weighed down by a “variety of institutional pressures to streamline content and delivery - to make learning more entertaining, agreeable, measurable, and above all, convenient for everyone concerned” (Sharpe, 2005, p. 3). Some of these characteristics can create enhanced opportunities for learning, while others can cause a challenge.

Academic advisors should possess a clear understanding of the students on their campuses, which includes understanding the generational factors of their students. Keeling (2003) notes that millennial students often have lofty goals and high expectations but often lack realistic plans for achieving their goals. Advisors must assist these students in aligning their educational and career goals. Advisors may need to offer extra attention because students are accustomed to receiving high levels of guidance. In addition, higher levels of parental involvement are to be expected with this generation of students.

Conflicts may arise easily between parents and advisors due to privacy laws that prevent advisors from sharing any information with parents regarding students.

Special Student Populations

With the ever-changing student population, trends arise detailing certain student populations that require additional attention from academic advisors. While it is useful to categorize students into special advising populations, it should be noted that these students are individuals first and should be treated as such. Special student populations can be categorized based upon three types of factors: (a) demographic characteristics over which students have no control (students with disabilities, Aboriginal students, first-generation students); (b) situational characteristics (mature students, transfer students, international student, student athlete s); or (c) academic outcome characteristics (students struggling academically). Many of these categories overlap, For example, an Aboriginal student may be a first-generation student who may also be struggling academically. It should also be noted that the characteristics of special populations, with the possible exception of students struggling academically, should not be perceived as negative or detrimental to university success. However, there should be an awareness that students from these populations do typically require extra attention.

Since the early 1990s, it has been a legal requirement for Ontario universities to ensure accommodations are available to *persons with disabilities* (Logan, 2009). The Council of Ontario Universities (COU) published their 2006/2008 Biennial report stating “3.8 % of the total undergraduate university population in Ontario are identified as having a disability” (2009, p. 3). This number has increased over the years but it is still considered to be an underestimate and underreported. The most common factors that

students with disabilities encounter according to Hemphill (2002) are various structural, educational, and bureaucratic issues. Advisors can assist students with various disabilities in many ways but as Logan (2009) comments, you cannot always easily decipher that a student has a disability just by looking at the student. “Learning disabilities refer to a number of disorders which may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information” (p. 1). Reiff (1997) provides numerous examples of accommodations for students with learning disabilities such as designated note takers, taped lectures, requests for faculty members to provide copies of lecture notes, or extra time for assignments or examinations. Sharpe (2005) records that “learning disabilities in general affect 1 in 10 students” (p. 2). In the case of psychiatric or learning disabilities, many students may not be aware or not want to disclose that they have a disability, which makes the job of an advisor more challenging when assisting this population. Advisors, in conjunction with other campus resource personnel, can also participate in making arrangements for students with physical disabilities to ensure accommodations are put in place, such as accessible classrooms, preferential seating, or assistive devices.

The increasing participation of *Aboriginal students* in Canadian higher education has been attributed to the development of services for these students, although the rates are still painfully low in Ontario with only 1.5% of the Ontario university student population being Aboriginal (COU, 2009). Many other provinces have higher rates than Ontario but the Aboriginal population is still sparse in Canadian higher education settings. Historically, Aboriginal students’ ability, and willingness to assimilate Western educational practices was an outsider’s measure of Aboriginals’ success in a Western

system. Unfortunately, revoking their traditions and ways of learning were seen as fundamental to their ability to excel (Castillo Clark & Kalionzes, 2008). Aboriginal students often struggle with the balance of integrating into mainstream education and maintaining their own cultural beliefs and traditions.

First-generation students are classified as being the first in their immediate family to attend the level of education that they are pursuing. Unless first-generation students choose to identify themselves, there is no way of identifying them. In Ontario, first-generation students make up 12% of the total undergraduate university population (COU, 2009). First-generation students are pioneers and often role models for their families, which comes with related expectations and pressures. “First-generation students do not have the benefit of parental experience to guide them, either in preparing for university or in helping them understand what will be expected of them after they enrol” (Riehl, 1994, p. 16). Collier and Morgan (2008) found that first-generation students, in contrast with traditional students, had more problems related to time management, devoted less time to their classes, and had fewer outside resources to help deal with demands. Students often seek the assistance of advisors with time-management issues. With the increasing opportunities for students to attend university, university staff are also finding themselves dealing with parents who are unfamiliar with university life and want to support their children but are unsure how (O’Heron, 1997). These students often need navigation on day-to-day university activities just as much as academic advice.

Mature, adult, and non-traditional students are all terms used for students aged 25 years or older who enrol in postsecondary education. Mature students are more likely to pursue part-time than full-time studies. In 2006, 16,000 students 35 years of age or older

(one in 40) were enrolled full-time in undergraduate degree and certificate programs at Canadian universities whereas, part-time mature students accounted for 62% of students (AUCC, 2007). This growing population of students can often experience very different barriers to success in postsecondary education than their younger classmates. These students are often tasked with multiple roles in their lives, meaning that university education may not be their primary responsibility. Life transitions and economic climate may force adults to explore ways to expand their skills to retain employment, find jobs, or compete for higher paying positions. Family responsibilities, course scheduling, and costs are just a few of the major constraints placed on mature students (Skorupa, 2002). Often, university environments cater to traditionally aged students ranging from 18-22 years of age. Researchers have highlighted that most university activities and services such as orientation, student support services, extra-curricular activities, and residence are tailored to traditionally aged students (Mancuso, 2001; Peck & Varney 2009). Forming groups with students much younger than themselves may also create anxiety for mature students. Lack of participation in these areas could lead to feelings of isolation and lack of belonging for mature students. Academic advisors may, in fact, need to spend more time with mature students relative to younger students, to ease the transition, account for additional responsibilities, ensure sense of community, and enculturate them into today's higher educational system. Adult learners who obtain good academic advising show better program retention results than their adult learner counterparts without advising (Shields, 1994, as cited in Mancuso, 2001). Based on these results, all efforts should be made for advisors to be in contact with mature students to assist in their success.

Students who *transfer* from one institution to another, either from college or another university, often require assistance with course selection and scheduling as they are typically out of sequence with their new institution's courses. "All transfer students enter a new and different institutional environment, which has different policies, different procedures, different advising structures, different terminology, different faculty and academic expectations" (Grites, 2004, ¶ 5). Hatton, Homer, and Park (2009) clarify that advisors serve a critical role for transfer students as they are often the first point of contact for students before and after the transfer. Advisors can counsel students on appropriate courses and relevant policies. They can also assist students by creating degree plans to decrease the number of courses students must retake. *The Ontario Transfer Credit System: A Situation Report* (Constantinueau, 2009) addresses some issues that can hinder students' mobility when transferring institutions such as minimum grades for granting transfer that are higher than a passing grade, refusal to give individual course credits from community colleges, and reluctance to allow transfer credits by some well-established universities intent on preserving autonomy and reputation for academic excellence. Strides are being made in attempts to encourage and ease these transitions with greater transparency and clear pathways for success.

Many institutions actively recruit *international students* but are ill equipped to handle their needs once on campus. The Council of Ontario Universities (2009) reports 7% of the total undergraduate university population in Ontario are international students. Transitional issues such as homesickness that most students face can be magnified for international students and often these students' first point of contact is their academic advisor. Increasingly, literature reveals that issues of plagiarism often arise within the

international student population. Juwah, Lal, and Belouci (2008), in a plagiarism project report, noted that some cultures teach largely through memorization and emphasize exact quotations as a sign of respect to teachers. These students may need assistance to learn the cultural rules and how to avoid plagiarism in the Canadian context. Faculty may also expect students to demonstrate critical thinking skills rather than regurgitate textbook answers. The differences in expectations between school in their home countries and in Canada can be difficult for international students. Charles and Stewart (1991) cite the following primary issues that advisors need to be aware of when dealing with international students: cultural sensitivity, language limitations, adjustment issues, academic overload, and academic restrictions. Financial concerns often plague international students as they are typically paying substantially higher tuition costs, are not eligible for the same type of funding opportunities as domestic students, and may face restrictions in employment opportunities. Fluctuating exchange rates often mean that their currency is of a lesser value than when they made the decision to study. Many of the issues surrounding international students can be very different than those facing domestic students.

Student athletes vary in extremes: some are conscientious and have learned to effectively marry their sport and schooling for success whereas others are characterized as lacking the academic prowess necessary to succeed in postsecondary education. In a 2004 interview, advising expert and U.S. National Collegiate Athletic Association cabinet member, Dr. Ruth Darling, remarked that successful students and successful athletes require the same set of skills and abilities. Discipline, focus, goal setting, achievement, overcoming adversity, and meeting challenges aggressively and with

integrity are all essential for student athletes. When dealing with student athletes she advises that “academic advisers must consistently integrate the student’s athletic passion with the goals of learning in a higher education culture” (Hamilton, 2004, p. 30). Student athletes are often seen as insufficiently prepared and unfocused for their academic responsibilities. “The reality for individuals who work with student athletes from an academic or student services perspective is that they are confronted daily with people who are underprepared, unlikely to graduate, priority skewed, and manipulated by the demands of their sport” (Whitner & Myers, 1986, p. 659). Ontario University Athletics (2009) cite approximately 9,000 student athletes in Ontario universities. In many U.S. universities, the importance placed on student athletes is enormous, whereas the Canadian system tends to place less importance on athletics and does not have a reputation for reducing academic standards for student athletes. Nonetheless, student athletes may face considerable challenges juggling the demands of their degrees with the time and travel commitments associated with their sport.

When students are *struggling academically* and not meeting the institutional academic requirements, this often results in those students being placed on probation. It is often a shock to students when they fail courses and do not meet the requirements necessary to proceed in university as often they excelled in prior schooling contexts. “Academic probation is usually necessitated following a pattern of poor performance which indicates that the student is having trouble in a wide variety of classes rather than a single course” (Gherke, 2006, p. 4). A major reason that students depart from higher education is due to academic difficulty (Tinto, 2003). Pascarella and Terenzini (1991) cite the major factors contributing to academic difficulty as peer culture, choice of

academic major, school environment, type of faculty contact, work, career choice, personal motivation, organization, study habits, quality of effort, and perceived control. A common advising duty is meeting with students who are struggling academically to assist them in making a plan for getting back on track and succeeding in university.

Landscape of the Ontario University System

Ontario universities are the focus of this research and as such, a background will give the reader insight into the overall dynamics of this higher education system. A review of three major fluctuations in enrollment and funding in Ontario higher education will be addressed: (a) veteran opportunities in the 1950s, (b) the fall and rise of funding in the 1990s, and (c) the Reaching Higher Plan in 2005. The Rae Report, a prominent provincial report and responses to its release will reveal one attempt that the Ontario government has made to improve its postsecondary educational system.

Background on Current Ontario Universities

There are 19 publicly funded universities in Ontario. These universities are autonomous, require approval for establishment from the government, and are publicly assisted by the government. "Tuition paid by students is a main source of revenue for universities. The provincial government regulates tuition and provides substantial student financial assistance" (Fallis & Rose, 2008, p. 1). The 17 private universities in Ontario receive no operating or capital grants from the government, are privately funded, have been given restricted degree-granting authority by the government, and are all theologically based (Johnston, 2000). Public universities in Ontario that provide undergraduate programs are typically three or four years in length and students who complete the requirements successfully graduate with bachelor's degrees. The Council of

Ontario Universities concluded that in 2008 “Ontario universities educated over 402,000 full-time students – about 42% of Canada’s total university population” (p. 6). “Ontario has the greatest university student population in all of Canada” (Constantineau, 2009, p. 5).

Enrollment and Funding of Ontario Universities

Higher education in Ontario saw a dramatic shift from institutions that were once reserved for the elite to a diversified climate with the return of veterans from World War II. In the late 1940s and early 1950s, qualified veterans were provided the opportunity to pursue university education with direct funding from federal government grants on a per-student basis. This per-student funding was opened up to additional populations to increase accessibility in the mid 1950s and tension mounted between federal and provincial governments. By the 1970s, the provincial government was only providing operating support to secular institutions and the federal government was only supporting university operating costs through provincial transfers. The federal government still had a central role in supporting university research. Research contracts with private industry increasingly began to appear to cover overhead costs associated with federal research funding (Jones & Young, 2004).

A recession in the early 1990s led the Ontario government to reduce operating grants and allow for increased tuition fees. In 1995, a change in the federal government whose primary concern was reducing deficits, resulted in a significant decrease in funding that has been blamed for crippling the higher education system. At that time, Ontario university tuition fees increased by an institutional average of 20 per cent to cover operating costs. The federal funding, in the form of provincial transfers, basically

came to a halt and federal research funding also experienced budget cuts. Towards the end of the 1990s, the federal budget was back on track and a renewed focus on research emerged. Several programs contributed to significant investments in university research efforts and some initiatives were designed to incorporate external funding from industry (Jones & Young, 2004).

In the province's 2005 budget, a 5-year plan was set out to "improve access to postsecondary education, enhance quality by adding more faculty and staff, and make postsecondary institutions more accountable to the public" (COU, 2006, p. 2). The government implemented a historic \$6.2 billion Reaching Higher plan, which was "the largest investment in postsecondary education in the province's history" (COU, 2006, p. 2). With the additional "investment in student aid to help more families with the cost of higher education" (p. 4), an influx of students entered the system, well beyond initial projections. The province's anticipated enrolment growth for the 2006 academic year was severely underestimated "by an increment of 14,000 students" (p. 1). The following years saw similar outcomes, which led to a massive shortfall in funding. *Progress Reports* (2006) revealed that from 2000-2009, Ontario universities should expect to see their student population grow by almost 50% due to overall skill requirements needed in the workforce, expectations associated with professional standards, and new workforce requirements for employees to upgrade academic qualifications. An unprecedented increase in students and underestimated funding has created an overall deterioration of the student experience.

Rae Report

In recent history, one of the most prominent reports on higher education in Ontario was the Rae Report (2005). The Ontario government mandated a review of the design and funding of the postsecondary education system in Ontario and appointed Bob Rae and an advisory panel to provide the review and recommendations. After a series of town hall and roundtable meetings, the report and recommendations were released in 2005 with mixed reviews from the public. The framework was guided by five overarching themes of: (a) accessibility, (b) quality, (c) system design, (d) funding, and (e) accountability. From those themes, seven strategies were devised and recommendations made (Rae, 2005). The report touches on many key elements that affect academic advising in Ontario universities. The Rae Report addresses the need for making higher education a priority in Ontario. The report also addresses financial constraints, retention issues, changing demographics, generational issues, and diversity within the student population (including those who are the first generation to attend university, are Aboriginal, are international, or have disabilities). Additional topics such as the need for collaboration between colleges and universities, and more clarity for transfer students are also undertaken. Academic advisors assist students in all of these categories. For example, the report calls for a closer look at retention rates stating that “the province and institutions would be able to establish better systems of support for those students to ensure that if they do drop out of one program, they are offered counselling and mentoring to move into an area of study that will engage their best efforts” (p. 15). Retention and mentoring are paramount to academic advising.

The public's feelings about the report were varied. Charbonneau (2005) hailed the report as being outstanding and having something for everyone, while the Canadian Federation of Students (CFS) remarked that it would only serve to "further create student debt and hike tuition fees," calling the report a culmination of "all the worst aspects that the U.S. and UK systems have to offer" (2005, p. 29). As a result of the report, "the Ontario government began to implement Rae's proposals in its 2005 budget. In particular, public base-funding for postsecondary education was increased, which should enable the sector to hire more faculty and reduce class sizes, even while its student intake increases" (Laidler, 2005, p. 2). The Ontario Confederation of University Faculty Associations (OCUFA, 2008) documents that changes were made to the Ontario Student Assistance Program. Specifically, book and supplies allowances were increased and up-front grants were re-introduced for the first time since the 1992-1993 academic year. Increased collaboration with colleges and a more comprehensive system for transferability have also been addressed with firm deadlines for new initiatives.

Theoretical Background

Over 110 years ago, an economist Vilfredo Pareto developed a mathematical formula based on his observations of wealth distribution in Italy. He observed that 80% of Italian land was owned by 20% of the population. Pareto also noticed that this consistent mathematical relationship was evident in many other areas of life. Lipovetsky (2009) quoted Pareto: "in any series of elements to be controlled, a selected small fraction in terms of number of elements almost always accounts for a large fraction in terms of effect" (p. 271). Decades later, Pareto was credited with establishing what has now been widely disseminated as Pareto's Principle, often also referred to as Pareto's

Law or the 80/20 rule. This relationship has been most commonly applied in the manufacturing and sales sectors. In manufacturing, it is proposed that 80% of process defects arise from 20% of the process issues, and in sales, 20% of the workforce generates 80% of revenues. The key point is not the exact percentage, but that this distribution shows how predictably unbalanced things really are (Koch, 2001). Others have applied this principle to explain everything from crime rates to customer complaints.

When researching the implementation of a community-based prevention program, researchers employed the Pareto Principle to explore types and frequencies of adaptations reported by facilitators. The Pareto Principle held true in multiple outcomes of the research. The Pareto Principle allowed the researchers to concentrate on the adaptations that occur with high frequency and not be concerned with the lower frequencies as they have little impact. "High frequency adaptations can then be targeted to determine their effect on outcomes; to address in training; and to assess on an ongoing basis for continuous quality improvement" (Griner Hill, Maucione, & Hood, 2007, p. 25). In a related field of educational structures and decision making, governance has also been linked to the Pareto Principle in that 80% of the value created by a board will typically be derived from 20% of its activities. Shifting the board's time allocation to handling only matters vital to their success will increase productivity (Carpenter, 2008). Similar outcomes will be researched for this thesis to discover if there is any relationship between advising tasks and the Pareto Principle in hopes to also address training and quality improvement.

Anecdotally, it seems that this relationship may apply to the work of academic advising. This thesis will seek to assess whether 80% of advisors' time and energy is spent on 20% of its special student populations. If the 80/20 rule applies to academic advising, then it will be an effective tool for making continuous improvements based on the results and allow advisors to better tailor their services to student populations with high needs. Academic advising is a multitask position and workload demand is a concern.

Learning what tasks are taking up the majority of advisors' time and strategizing to better handle those tasks could result in a more manageable workload. For example, if an advisor finds that 80% of time is occupied with students struggling academically, then that advisor may be able to implement up-front strategies to assist this population or employ more targeted strategies for dealing with this population to maximize time and efforts. This discovery may also help to determine where new resources are needed or could be best utilized. Although a common understanding of the 80/20 rule exists, academic advisors may be largely unaware of how this principle applies to their field. "The 80/20 Principle asserts, that when we know the true relationship, we are likely to be surprised about how unbalanced it is" (Koch, 2001, p. 11). Researching this area to see if a small minority has a dominant impact on advisors' time, will hopefully lead to new ways of approaching advising tasks.

Summary

Chapter Two has provided a rich overview of the literature that exists in relationship to academic advising, university students, the landscape of the Ontario university system, and the theoretical underpinnings of Pareto's Principle. Chapter Three will detail the design, sampling, ethical considerations, implementation, and data

collection of a uniquely developed questionnaire for the purpose of this study. Chapter Three will also include a discussion of the questionnaire analysis methods and limitations of the questionnaire.

CHAPTER THREE: METHODOLOGY AND RESEARCH DESIGN

Both people and practices of academic advising in Ontario universities have gone largely unexamined. This thesis profiles the general landscape of academic advising in Ontario universities by employing a quantitative descriptive survey research design to address this issue. According to Creswell (2005), there are four major components of survey research: (a) sample from a population, (b) design instruments for data collection, (c) collect data through questionnaires or interviews, and (d) obtain a high response rate. Following Creswell's components for survey research, I used nonprobability sampling by approaching academic advisors at Ontario universities as the target population for this study. In Ontario, there are over 1,700 kilometres between the most northerly university (Lakehead, Thunder Bay) and the most southerly university (Windsor). Therefore, due to the vast geographic distances across the target population, it was decided that the most viable method of survey design was to use an electronic questionnaire. I created an electronic questionnaire to derive a solid knowledge base regarding the professionals who advise and the structures that they work within. This survey was administered to the target population who were given two weeks to complete. Respectable response rates followed due to pre-notification and follow up of the questionnaire as well as a concise and clear questionnaire in a field that is of interest to academic advisors. There were three main limitations to this questionnaire with respect to the exclusion of colleges, graduate education, and advisors outside Ontario. This survey provided an avenue where academic advisors could contribute to the knowledge base about their profession.

Survey Design

I conducted this research because there was a growing recognition that information specific to Ontario academic advising professionals and practices did not appear to exist. I felt it was pertinent to develop a survey instrument that would help to build a foundation to highlight the professionals and practices that make up academic advising in Ontario. Creswell (2005) suggests survey studies describe trends in the data rather than providing definitive explanations. The focus of survey research is to learn about this specific group. After assessing numerous possibilities, I chose survey research because it best describes trends and patterns about specific populations.

This study incorporated a cross sectional survey design as I collected data at one point in time to ultimately provide a provincial assessment. Since my main interest was to profile academic advising in Ontario, the dominant intent of the questionnaire was focused on capturing background information. To a lesser extent, attitudinal and behavioural measures were also included. Different scales were used for this questionnaire including nominal, ordinal, and interval scales. This questionnaire examined current demographics and general practices of academic advisors in Ontario. This questionnaire was designed to uncover the tasks and student populations that occupy academic advisors' time.

The questionnaire consisted of 20 questions, many of which were close-ended and were of a basic nature to make it easy for participants to complete. To eliminate the possibility of missing data, the questionnaire was designed so that the participants were required to answer each question before moving to the next question. There were no

incentives given to those completing the questionnaire as the administration of such incentives would decrease the rate of anonymity of participants.

Online Survey Method

The benefits of online survey methods are numerous with cost and timesaving being paramount. Buchanan and Hvizdak's (2009) research reveals a host of advantages when using online survey methods such as low cost, increased anonymity, ability to survey over broad geographical and demographic areas, ease of recruitment and administration, and ecological benefits in terms of reduced paper waste. The ability to collect textual data via electronic questionnaires reduces the need for transcription, thus reducing the likelihood of error thus, increasing the accuracy of data and, potentially, the validity of inferences drawn from them (Franklin & Lowery, 2001; Murray & Fisher, 2002).

The survey population was large as it included all advisors at publically funded universities in Ontario. Therefore, to best maximize ease and participation, an electronic questionnaire was chosen. Participants answered the electronic questionnaire and the results were recorded in the survey engine's secure database. The online survey method was chosen to reduce costs, maximize ease for participants as they could access the questionnaire at their leisure, and increase the level of anonymity. Surveygizmo was chosen because it is free of charge, and it allowed me the most flexibility in regard to the number of questions and responses allowed.

Questionnaire

The electronic questionnaire consisted of consent information on the opening screen followed by 20 questions (see Appendix A). The questionnaire was estimated to

take approximately 10 minutes to complete. The majority of the questions were close-ended and structured with predefined options from which the participants chose.

Participants answered the questionnaire and then submitted it electronically.

The background section included two types of demographic information: personal and institutional. Personal general demographics collected include gender, age, ethnicity, educational attainment, employment status, and salary range. Personal job demographics obtained include title, training, length of time advising, and professional development. Institutional demographics include institutional size, structure of advising, communication with other advisors, advisement caseload, and categorization of student populations in caseload. Many questions used nominal scales where the participants checked one option that best described their situation. Some questions used ordinal scales.

The third part of the questionnaire pertained to advising practices. Attitudinal measures were used to ascertain participants' feelings with regard to the number of students they advise and ways to improve the advising structure at their institution. Participants were asked to indicate their own perception about the percentage of time used during certain job responsibilities as well as with certain student populations. Participants were also asked about the length of time they had been advising. The ordinal scale measurements used in this questionnaire were primarily for questions that were attitudinal or behavioural.

Pilot Testing

I selected four individuals to pilot test the questions. One colleague from my own institution who is a faculty member with academic advising responsibilities provided

critical feedback from multiple standpoints. Another colleague from a different university in Ontario was asked to review the questions to ensure clarity from a different institution's advising perspective. The chair of the NACADA Canadian academic advising interest group who is based in another province also assessed the overall cohesiveness of the questionnaire. Lastly, I asked my supervisor to review the questionnaire through an academic lens. The pilot group provided feedback in regard to both the format and the questions of the questionnaire. I took their feedback into consideration when producing the final questionnaire. The individuals who completed the pilot testing did not participate in the final survey.

Sampling and Participants

Due to the nature of the target population, non-probability sampling was used to derive data from participants that were available and willing to participate. A combination of convenience and snowball sampling was included in this study. I attempted to gain the largest sample possible to ensure the most comprehensive data were gathered. The participants were eligible for the study if they were working in an academic advising capacity at one of Ontario's 19 publically funded universities.

Prospective participants were primarily located through searches of their institution's public website using the heading "academic advising." I also phoned universities seeking out any academic advisors for participation in the study. The listing I developed was cross listed with a contact listing from the Ontario Advisors steering committee. Through the methods listed above, 376 potential participants were identified. I sent an email notification about the questionnaire to each of these individuals.

Due to the variety of titles that fall under the same job duties associated with academic advising, I also employed snowball sampling. This sampling method was used to obtain a wider participant base by encouraging willing participants to pass on my information to their fellow advisors not originally identified who might be interested in participating in the questionnaire. Potential respondents may have also gained knowledge about the questionnaire through colleagues or through recruitment flyers (see Appendix B) distributed at an Ontario Academic Advising Conference.

Data Collection

In mid April 2010, the online questionnaire link was emailed to all 376 contacts and 15 emails were returned undeliverable as the advisor was on a leave of absence or had left the position. Four of the automatic responses designated a new contact and I emailed the questionnaire to the new contact and updated my original contacts listing; therefore, the valid number of questionnaires sent was 365. All contacts were given two weeks to complete the questionnaire. Three days before the close of the questionnaire, a follow-up notice was sent to all contacts reminding them to participate if they had not already done so. Due to the electronic nature and the desire to further secure anonymity, there was no way for me to contact only those individuals who had not completed the questionnaire.

The day I sent out the questionnaire I got a few responses from potential participants all from the same university that stated they were unable to access the questionnaire link. I followed up with the survey provider and they responded that some universities have had issues with phishing attacks and therefore, some of the internal securities may have blocked the link. The survey provider contacted the university to

allow access for the questionnaire, the university agreed and access was granted. The potential participants who had initially notified me of an issue were contacted when the situation was remedied so that they could access the questionnaire. When the reminder email was sent out to all participants, it included information that there were some initial issues with the link and that these issues had been remedied. The reminder email also asked that if any issues remained to notify me. I received no additional comments from potential participants regarding any further issues with the link for the questionnaire. The questionnaire link closed at the end of April and data analysis began.

Participation was determined by the completed questionnaires submitted by the deadline. The questionnaire was sent to 365 valid email contacts and 151 participants responded, reflecting a response rate of 41%. Complete (or near complete) data were received from 138 participants with partial data from the remaining 13 respondents. This response rate shows that my hope was realized; there was significant interest in the topic from academic advisors across the province and advisors were generally willing to participate.

Data Analysis

The raw electronic data gathered from the online questionnaire were retrieved and downloaded directly into Statistical Package for the Social Sciences (SPSS) version 17.0. The SPSS statistical program was chosen for its familiarity and availability. Each participant response automatically generated a random 8-digit participant number that could not be linked to the participant. I used the SPSS program to clean the data by sorting through the variables and looking for any inconsistencies. To obtain a clear profile of what academic advising is in Ontario universities, initial descriptive statistics

including frequencies were used to summarize the data. Chi-square analyses and two forms of correlation coefficients, Pearson product-moment correlations for interval data and Spearman's rank correlations for ordinal data, were used to relate multiple variables

From the questionnaire analysis, I was interested in obtaining and presenting both a profile of advising and a more in-depth exploration of the research questions. I looked at all the frequencies for the entire questionnaire with particular interest in various categories from personal and institutional demographics and advising. I was focused on investigating gender, title, institution size, duration of advising meetings, advising structures, responsibilities, caseload, time spent with special student populations, perceptions about caseload, and what advisors believed were the most important strategies to improve advising.

A more thorough investigation was made to find out if any statistical relationships existed between institution size and number of students in caseloads, perceptions about caseloads, and length of advising meetings. I was curious to find out if advisors spent most of their time with special student populations. The analysis included an investigation of how demographics relate to structure and advising.

Limitations

There were many components that were used for the benefit of this research, although, these same components could be seen as potential limitations. The questionnaire length was concise and consisted of measurable data, which was ideal for participation purposes but may have not led to a comprehensive study. Using a web-based questionnaire maintained the anonymity of the participants, but it made it more difficult to determine who had completed the questionnaire and led to challenges

surrounding certain variables such as institution size. The timeframe when the questionnaire was released to respondents could have lessened the volume of responses for the questionnaire as it may not have been ideal timing for some respondents.

The primary limitation was the scope of the study. In hopes for a greater number of respondents, I created a brief questionnaire that would not take much time to complete to entice individuals to participate. The quantitative questionnaire consisted of 20 questions that were mainly demographic and basic background information; most questions were not very specific or extremely detailed. A quantitative approach was chosen because it served the initial research purposes, but a mixed methods study would have allowed a broader scope including a qualitative aspect that could have increased the study's depth.

Although the web-based survey ensured anonymity, there remains a concern that the person completing the questionnaire may not be the person it was originally intended for and thus it may lack authenticity. The questionnaire was not set up to limit the number of times someone could participate in the questionnaire; therefore, a participant could answer the questionnaire multiple times, which could decrease the validity of the results. The survey software does not track any personal identifying information such as email addresses; therefore, it was impossible to know who had completed the questionnaire and who still remained. To further protect confidentiality, I did not ask participants to identify their institution. This means that I was unable to determine how many respondents were from any one institution or how many institutions were represented in the final data set. This limitation means that I was unable to draw specific conclusions about institutions of a particular size.

The questionnaire was released in mid-April, near the end of the academic term and participation could have been reduced due to conflicting demands on the advisors' time with academic year-end closing tasks and for advisors who manage summer course planning and registration. However, registration periods and year-end procedures differ at many institutions; therefore, some advisors' may have found this timing to be ideal to complete the questionnaire.

Ethical Considerations

Ethical issues have been considered at each stage of this research. Clearance was obtained from the Brock University Research Ethics Board, File: 09-216 McGinn (see Appendix C) to ensure that there was minimal risk involved for participants and that the participants' rights were considered in the process of this study. There were no foreseeable risks to the participants greater than those that the participants may encounter in everyday life. There was no deception involved in this research. I have not received any personal benefits related to this study. There was no potential for participants to feel obligated to participate in this research as I was not aware of who had or had not completed the questionnaire.

Participation was voluntary and purely web based. All participants were adults; voluntarily completing the electronic questionnaire served as consented participation in the study. There was information at the beginning of the questionnaire that detailed the voluntary nature of participation, that participants had the right to withdraw at any time, the purpose of the study, and the approximate length of time it would take to complete the questionnaire (see Appendix A).

Protecting the anonymity of the participants is of utmost importance. Participants were not asked to provide their names, email addresses, or institutional names when participating in the questionnaire. The names or contact information of individuals who were solicited to participate in the questionnaire were not used when reporting results. Responses were received anonymously through the online survey database. The questionnaire results were automatically recorded into the survey engine's secure database. I then retrieved the raw data but no email addresses or computer IP addresses were recorded.

For questions of a sensitive nature, options were given to decline to answer the question. Data obtained from the questionnaire did not have any distinctive character or recognition factor for participants. Job titles of participants were only used to find out the common job titles for the work academic advisors carry out. Institutional names were not listed in the questionnaire nor linked with any of the results. Incomplete data were used when enough information was retrieved to allow for comparison to complete information. It is my intention for the questionnaire results to be used in this thesis report, and there are currently no other substantiated plans for it. A potential benefit to the participants will be that the results will allow the participants to gain a greater understanding of how they and their institution fit into a larger provincial setting. At the end of the questionnaire, there was contact information for the participants to contact me with any comments, questions, or for a summary of the results; the onus was on the participants to contact me. This was done separately from the questionnaire, thereby further protecting the anonymity of the participants by preventing any responses from being matched to an individual's identity.

Credibility

Credibility was taken into consideration during each stage of the questionnaire from development to delivery. In the development stage, I ensured that the questions were decisive; if applicable they had continuous intervals and had a variety of response options to attempt to encompass all possible answers. After the development was completed, to further increase reliability and consistency, a pilot test (as addressed above) was conducted. The pilot study was performed to ensure reliability through direct and clear questions. Procedures for the delivery of the questionnaire were standardized because the same questionnaire was distributed to each participant on the same day and time, and all participants had the same deadline for completion of the questionnaire. There was a two-week window when participants could answer the questionnaire, thus allowing the participants to choose a time that was ideal for them rather than being forced to complete the questionnaire when their personal conditions may have been less than ideal. The survey method was not conducive to many types of common reliability testing such as test-retest, alternative forms of reliability, interrater reliability, or internal consistency.

Content validity as described by Creswell (2008) encompasses how well the questions represent all of the possibilities of questions available. While the questionnaire was short in length, it did cover essential background information to understand who performs academic advising at Ontario universities and what they do. Again, a pilot questionnaire was distributed to ensure no critical questions were missed.

Quantitative research is often characterized as objective. However, Peshkin (1988) holds the view that “subjectivity operates during the entire research

process...one's subjectivity is like a garment that cannot be removed" (p. 17). During this research process, I made a conscious effort to be aware of my own bias and how it affected the research. Since I am an academic advisor, I have a vested interest in this research. While I was mindful of my own feelings about advising matters, I attempted to remain neutral. I completed the questionnaire and the results were tabulated with the rest of the population as I am a valid member of the target population. Some of the questions in the questionnaire may have had undertones of bias to them as some of the possible answer selections were derived from my own personal experience as an academic advisor. Feedback during the pilot stage was an attempt to reduce this bias and ensure relevance across institutions.

Summary

Chapter Three included a comprehensive review of the procedures taken to ensure the outcomes were an accurate representation of the data sought. The research is a quantitative descriptive research design including a brief electronic questionnaire to academic advisors across Ontario universities. The research design, implementation including data collection methods, and the basis for analyses were all reviewed. Limitations of this study were clearly presented as was the focus of ensuring ethical considerations were always at the forefront of this research.

In Chapter Four, further detail of the results of this research will be provided including descriptive and inferential statistical findings with particular focus on capturing an overview of advising people and practices as well as a more in-depth review of special student populations and the applicability of the Pareto Principle to advisement.

CHAPTER FOUR: RESEARCH RESULTS

Using a quantitative descriptive survey design, this research sought to explore academic advisement in publicly funded Ontario universities. Both personal and institutional demographics were recorded. Advising practices were further investigated to gain a better understanding of the job-related tasks and to decipher if the Pareto Principle could be applied to academic advisement. The quantitative data collection instrument used was an electronic questionnaire consisting of 20 close-ended questions.

The questionnaire was sent to 365 valid email contacts, with valid responses received from 138 to 151 participants for each question. The participants represented a diverse population from universities across Ontario who worked in academic advising capacities. I used the SPSS program to clean the data by sorting through the variables and looking for any inconsistencies. I found that some of the “other” categories contained information that could have fit into the pre-determined options given and therefore re-coded some of the responses into the proper categories. I report results based upon valid percentage of responses for each individual question and, unless otherwise stated, I ignored “decline to respond” or “other” categories when analyzing the data.

In this chapter, results are organized primarily around the research questions:

1. Who are academic advisors at Ontario universities?
2. How do Ontario universities structure the work of academic advisors?
3. How do academic advisors apportion their time across student populations?

Descriptive analyses were calculated where appropriate and a variety of tables and figures have been generated to visually depict the results ascertained from the questionnaires received. Inferential statistics were used to explore group comparisons and

correlations regarding advisement tasks, structures, and perceptions. Analyses reveal diversity between advisors and advisement structures, and no evidence to support the Pareto's Principle regarding academic advisors' allocation of time to work with special student populations.

Academic Advisors in Ontario

As anticipated, participants varied widely from institution to institution in all demographic information being sought. Both general demographics as well as job-related information such as title, length of time advising, training, professional development, and membership were included in the questionnaire.

The first section of the questionnaire asked respondents to report on personal demographic information. Results were tabulated using frequencies and percentages. Of the 138 respondents, 82% (N=113) were female and 18% (N=25) were male (Q1). The most frequently occurring age range was 40-49 years of age, which represented 29% of respondents (Q2). The age ranges before and after the mode closely followed behind with 26% of respondents listing their age range as 30-39 and 25% identifying 50-59 as their age range. Overwhelmingly, the ethnic composition was Caucasian (92%, N=127); of the remaining 8%, 3 respondents identified themselves as Asian and there was 1 respondent from each of the following ethnicities: Aboriginal, Black, Latino, and Multi-Racial/Other (4 respondents selected the decline to respond answer) (Q3).

Thirty per cent of the participants stated their gross annual income was between \$50,000-\$59,000 (Q4). The second most commonly reported income was \$60,000-\$69,000 (23% of participants). Closely trailing in third was 18% of the respondents earning \$40,000-\$49,000 annually. The highest income option was \$100,000 or above,

which accounted for 10% of respondents. Annual income below \$40,000 accounted for 4% of the respondents. Results show that 87% of respondents work full time and 13% work part time, so I tabulated separate frequencies for the two participant groups (Q5). Part-time advisors were most likely to report the \$40,000- \$49,999 income bracket whereas full-time advisors were more likely to report the \$50,000- \$59,999 income bracket.

Almost half of the respondents (49%) listed their highest level of education as a bachelor's degree and 31% a master's degree (Q6). "Academic Advisor" was the most commonly used title (50%) (Q7). As mentioned earlier, positions that encompass academic advising roles are varied and the second most common response to the job title question was "other," with 23% of the sample providing responses ranging from associate dean to academic receptionist. I also narrowed the data further to specifically review the titles of advisors who had listed earnings of \$100,000 or above (Q7, Q4). Nine of thirteen respondents from the \$100,000 category listed themselves in positions typically considered higher managerial or administrative, such as faculty advisor or chair.

When asked if they had received any training when they became advisors, 61% responded that they had not, whereas 39% had received training (Q8). Of 138 respondents, the responses were varied with respect to the length of time they had been advisors: 38% had been advising for 6-10 years, 23% had been advising 3-5 years, 18% had been advising more than 15 years, and 17% had been advising for less than 3 years (Q9). Data revealed that 86% of respondents had access to professional-development resources (e.g., conferences, membership fees, resource purchases) whereas 14% had no access to professional-development resources (Q10).

Academic Advisement in Ontario

Just as there was variability among the academic advisors who responded to the questionnaire, there was also variability across the institutions where they worked. In this section, I describe the respondents' institutions and the ways academic advisement was structured within those institutions. There are many assumptions regarding the impact of institution size on advisement, so I draw particular attention to the relationship between the size of the institutions where respondents worked and various features of advisement within these institutions.

Institutional demographic information revealed that 37% of participants were employed by institutions that have an enrollment of 10,000-19,999 undergraduate students, 19% of respondents work for Ontario universities that have enrollments of 20,000-29,999, and 16% of participants were at schools that have 5,000-9,999 undergraduate students (Q11). Results revealed that 8% of the participants work at Ontario universities that have fewer than 2,500 students as well as 8% work at institutions sized 30,000-39,999. Of the responses, 6% listed their institution size as 2,500-4,999 and 6% listed more than 40,000 undergraduate students at their institution.

For some of the analyses, I reclustered these categories into larger groupings to define small (<10,000 undergraduate students), midsize (10,000-19,999 undergraduate students), and large institutions (\geq 20,000 undergraduate students) (Q11 condensed). The subdivisions into these three categories reflect current statistics about the 19 publicly funded universities in Ontario: 6 universities can be classified as small institution, 6 institutions can be classified as midsize, and 7 can be classified as large (Council of Ontario Universities, 2010). Similarly, respondents to the questionnaire were quite evenly

split across these three categories: 30% of respondents were from small universities, 37% were from midsize universities, and 33% were from large universities.

The most common structure of advising reported by participants was decentralized with 45% of the respondents stating that advising services were managed by faculty or staff in the academic departments (Q12). Almost equally frequent, 43% of respondents stated that their institution had a shared structure where advising services were centralized with additional faculty or staff advising in academic departments. Very few respondents worked at institutions with fully centralized systems (12%).

These advising structures were related to the size of the institutions in which participants worked (Q11 condensed, Q12). Respondents from small institutions tended to report decentralized (40%) or centralized (38%) advising structures, and less frequently shared (23%) advising structures. Respondents from midsize institutions reported working in shared (60%) or decentralized (40%) advising structures, and not centralized (0%) advising structures. Respondents from large institutions followed a similar trend as those from midsize institutions; there was only minor difference between the reported prevalence of decentralized (53%) and shared (42%) advising, with the smallest portion of respondents identifying centralized (4%) advising structures. Table 1 presents the number of respondents working within each type of advising structure across the different institution sizes. Chi-square analysis revealed that respondents reported different advisement structures depending on the size of their institutions, $\chi^2(4) = 36.857$, $p < .001$. Specifically, it seems that respondents from small institutions experienced a different balance across the three types of advising than respondents from midsize or large institutions. In particular, centralized advising structures were quite common for

Table 1

Advisement Structures Identified by Respondents From Different Sized Institutions

Institution Size (undergraduate enrollment)	Advisement Structure		
	Decentralized	Shared	Centralized
Small (< 10,000)	16	9	15
Midsized (10,000-19,999)	20	30	0
Large (\geq 20,000)	24	19	2

Note. $\chi^2(4) = 36.857, p < .001$.

respondents from small institutions but rare for respondents from midsize or large institutions.

Analysis regarding number of students on advisors' caseloads indicated interesting results, including exceptionally high caseloads for a large percentage of the respondents (Q14). Given the importance of caseload to most advisors, a visual representation of percentages is provided in Figure 1. Nine participants were not sure how many students were included in their caseloads. Of the 119 participants who provided numeric estimates of their caseloads, almost half (45%) had over 900 advisees in their caseload, suggesting that the upper limit that I set in the question was too low to reflect current circumstances. All other caseload ranges were also represented, demonstrating considerable diversity. Caseloads under 150 and 600-749 were each listed by 13% of the respondents. Caseloads of 300-449, 450-599, and 750-899 were equally common (6% of respondents).

Similar to the institution size variable, I also condensed the number students in the caseload variable to create two categories based on the reasonable standard of 300 as set by Habley (2004) (Q14 condensed). Specifically, I distinguished between advisors who were below the accepted level of 300 students on their caseload (24% of respondents) and those who were at or above this level (76% of respondents).

Given these high caseloads, it is not surprising that over half of the respondents (56%) indicated they had too many students in their caseload (Q19). In contrast, 44% indicated their current caseload reflected "the right number of students." Only 1 respondent (.9%) indicated that she had "too few students;" this individual was a part-time employee. In addition to those who provided assessments of their caseloads,

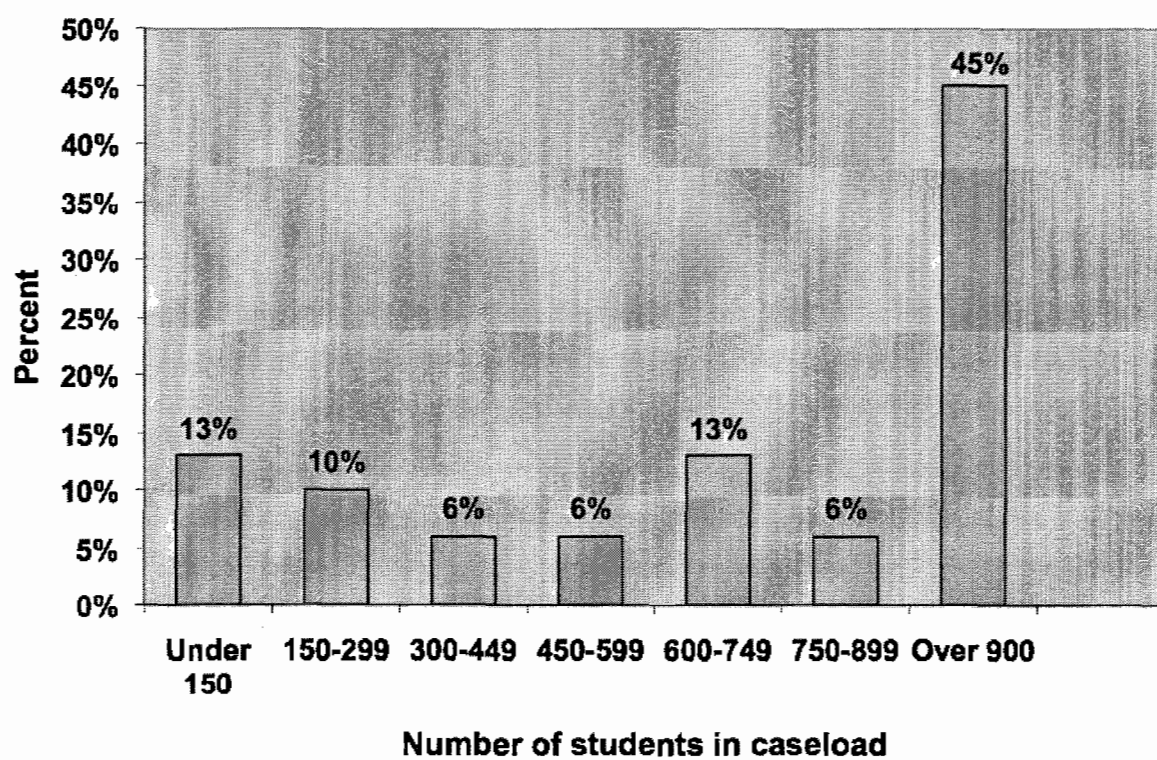


Figure 1. Academic advisor student caseload.

6% of the respondents, who were not factored into the percentages above, indicated the question was not applicable. Using Spearman's rank correlation coefficient, I established that there was a positive correlation between reported caseloads and advisors' perceptions about their caseloads ($\rho = .419, p < .01$), suggesting that advisors were more likely to report they had too many students as their caseloads became larger (Q14, Q19). Not surprisingly, participants with caseloads below the accepted level of 300 students tended to perceive their caseload as "just right" (70%) while those with caseloads at or above the 300 level tended to perceive their caseload as "too many" (64%) (Q14 condensed, Q19). A chi-square analysis confirmed a statistical difference in these results, $\chi^2(2) = 13.656, p = .001$ (see Table 2).

Using Spearman's rank correlation coefficient, I found no significant correlations between institution size and caseload ($\rho = .151, p = .103$) (Q11, Q14). I also conducted a chi-square analysis to compare the prevalence of caseloads above and below the acceptable level of 300 students across different sized institutions (Q14 condensed, Q11 condensed), which revealed no differences based upon institution size, $\chi^2(2) = .065, p = .968$. Similarly, there was no correlation between institution size and perception of caseload ($\rho = -.001, p = .992$), that is, respondents across different sized institutions were equally likely to believe there were too many or just the right number of students in their caseloads (Q11, Q19). These results contradict common misconceptions regarding larger caseloads for larger institutions and smaller caseloads for smaller institutions.

In addition to caseload size, I also investigated time allocated to advising meetings and other advising responsibilities. Respondents reported that advising meetings

Table 2

Student Caseload and Perceptions About Student Caseload

	Perception of Student Caseload		
	Too Few	Just Right	Too Many
Student Caseload			
Acceptable (<300)	1	17	6
Over Acceptable (≥ 300)	0	30	53

Note. $\chi^2(2) = 13.656, p = .001$.

with students tended to be 15-29 minutes in length (62%) (Q16). The next most common length for advising meetings was less than 15 minutes, which accounted for 19% of the answers, followed by 16% for advising meetings lasting 30-45 minutes. I found no correlation between institution size and average length of advising meetings ($\rho = .067$, $p = .455$) (Q11, Q16). Similarly, caseload and perceptions of caseload had no effect on the duration of advising meetings. I used chi-square analysis to compare the duration of advising meetings for those respondents with fewer than 300 students in their caseload and those with 300 or more students (Q16, Q14 condensed). This analysis revealed no statistical differences, $\chi^2(3) = 3.937$, $p = .268$. Likewise, there were no statistical differences in the duration of advising meetings for those respondents who perceived their caseloads as “just right” compared to those who perceived there were “too many” students on their caseloads, $\chi^2(3) = 1.254$, $p = .740$ (Q16, Q19)

I also investigated frequency of meetings with other advisors (Q13). Collaboration with other advisors on campus occurred monthly for 41% of respondents, followed by 21% meeting daily with other advisors, 16% meeting annually, and 15% meeting less than once per year. Spearman’s rank correlation coefficient revealed a significant positive correlation between institution size and frequency of meetings with other advisors on campus ($\rho = .232$, $p = .007$) (Q11, Q13). It would not be surprising for larger institutions to have more advisors, making it possible and probably advantageous to meet more frequently with other advisors. I also sought to identify any differences in the frequency of meetings with other advisors on campus based upon institutional advising structure (Q13, Q12). As shown in Table 3, chi-square analysis revealed statistical differences, $\chi^2(8) = 42.371$, $p < .001$. Advisors working in centralized advising

Table 3

Frequency of Meetings with Other Advisors on Campus for Respondents Working Under Different Advisement Structures

Frequency of Meetings with Other Advisors on Campus	Advisement Structure		
	Decentralized	Shared	Centralized
Daily	5	13	10
Weekly	3	4	2
Monthly	40	14	2
Annually	5	15	2
Less than Once Per Year	8	12	1

Note. $\chi^2(8) = 42.371, p < .001$.

structures tended to report daily contact with other advisors on campus (65.5%), whereas respondents working in decentralized structures tended to meet on a monthly basis (58.8%). There was no systematic pattern in the frequency of meetings with other advisors for those respondents working in shared advising structures.

Since academic advising positions include many different types of tasks, participants were asked to assign percentages to the time they spent on common advising responsibilities; results are displayed in Figure 2 (Q17). The most time was spent on course selection and registration tasks, which accounted for 26% of advisors' time.

In the final question in the questionnaire, participants were presented with five possible pre-determined options to improve the advising system at their institution; they were asked to rank the importance of each option, with number 1 being the most important factor to improving the advising structure at their institution (Q20). Table 4 displays how many respondents ranked each option from most important to least important. The most popular rank order for each suggested strategy is identified in boldface. The responses regarding strategies to improve advising at institutions revealed that the number one thing most advisors would do to improve the advising system would be to increase the number of advisors (43%) whereas 39% of advisors ranked the least important factor as an "increase in pay."

Allocation of Caseload and Time Across Student Populations

Through analysis, I sought to test the extent to which Pareto's Principle, which generally proposes that a small portion of the population accounts for a large proportion of the effect, could be applied to academic advising. Participants were asked to categorize their caseload based upon student populations (Q15) and time spent with student

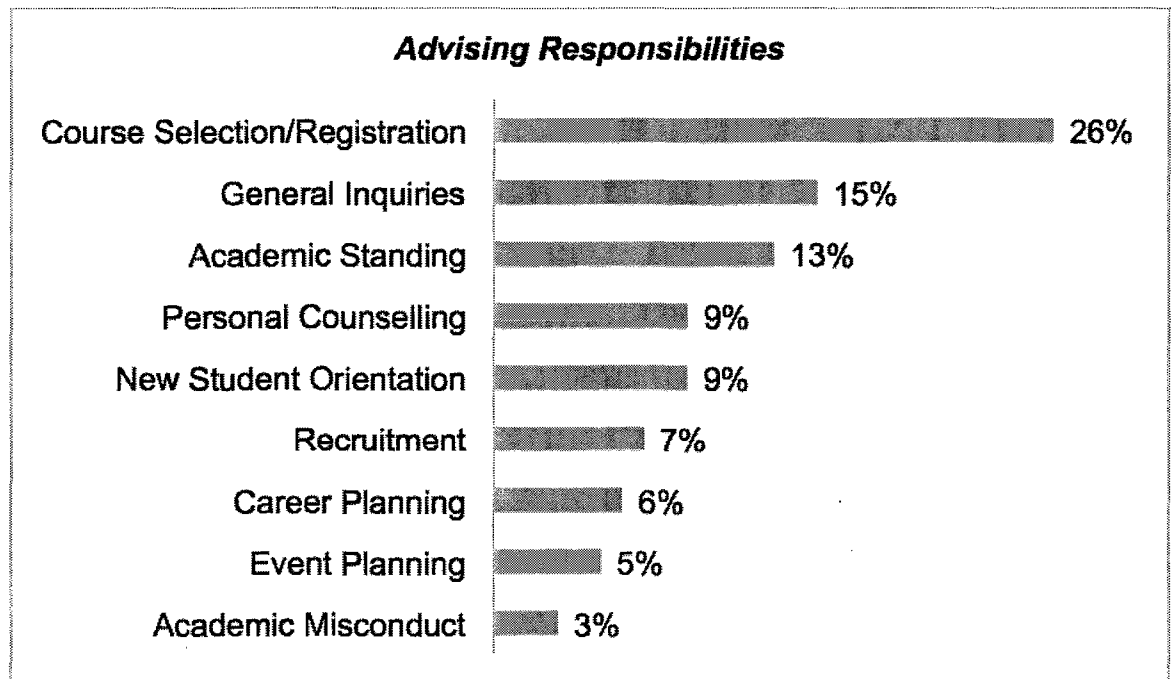


Figure 2. Percentage of time allotted to different advising responsibilities.

Table 4

Number of Participants Indicating Each Rank Order for Strategies to Improve the Advising System at Their Institutions

Strategy	Least important	Fourth in importance	Third in importance	Second in importance	Most important
Increase number of advisors	18	13	16	22	52
Increase number of support staff	14	27	26	38	16
Increase technological resources	23	23	35	23	17
Increase professional-development resources	19	30	20	27	25
Increase pay	47	28	24	11	11

Note. Boldface indicates the most popular rank order for each suggested strategy.

populations (Q18), which were on two separate pages of the electronic questionnaire (see Appendix A). Both of these questions were formatted in the same way in that both questions contained the same student categories to choose from and asked the participant to total to 100% for caseload and for time spent. With an electronic format, it is unlikely that participants went back to check what they had answered for caseload before they answered time spent. I wanted to see if caseload and time spent were equally distributed. Using Pearson's product-moment correlations, I established that there were strong positive correlations between each pairing of caseload and time allocation for each student population (see Table 5) (Q15, Q18). These findings suggest that advisors' caseload for particular student populations and the time they allocate to those student populations are proportional and therefore, the Pareto Principle does not apply. Table 5 also depicts the percentage means for caseload and time reported for each student population; respondents' answers varied considerably, in their estimates of caseload and time, and the averages reported here do not total 100%. Means indicated that the largest portion of advisors' caseload (38%) and time (37%) was spent with regular undergraduate populations whereas the next closest consumer of time was academically struggling students with 23% of caseload and 24% of time spent.

I calculated Spearman's rank correlation coefficients to learn if there were any relationships between duration of advising meetings and caseload for any of the student populations (Q16, Q15). There were no significant correlations between these variables. I then conducted a similar analysis on duration of advising meetings and time spent with the different student populations and one statistical relationship was found: Advisors who worked with higher proportions of students with disabilities tended to have longer

Table 5

Means and Correlations for Caseload and Time Allocation Across Student Populations

Student Population	Caseload	Time	<i>r</i>
	Mean %	Mean %	
With Disabilities	7	9	.739**
Aboriginal	5	6	.994**
First-Generation	15	12	.843**
Mature	8	8	.943**
Transfer	12	12	.801**
International	9	11	.850**
Athletes	5	4	.708**
Academically Struggling	23	24	.580**
Regular Undergraduate	38	37	.742**
(not in above categories)			
Regular Graduate	6	7	.888**
(not in above categories)			

Note. ** $p < .001$.

I then conducted a similar analysis on duration of advising meetings and time spent with the different student populations and one statistical relationship was found: Advisors who worked with higher proportions of students with disabilities tended to have longer advising meetings ($\rho = .324, p = .005$) (Q16, Q18).

After determining that the regular undergraduate student population accounted for the largest portion of caseload and time, I further investigated correlations between regular undergraduate student caseload time allocated to the different advising tasks (Q15, Q17). This student population was correlated with higher responsibilities in the area of general inquiries ($r = .270, p = .014$). A correlation between time spent with regular undergraduate student populations and general inquiry tasks was also evident ($r = .301, p = .006$) (Q18/Q17).

I then explored the impact of special student populations by conducting Pearson product-moment correlations to find out if there were any relationships between proportion of caseload or time with special student populations and time allocated to the different advising tasks. Correlations of caseload and time allocation with each of the advisor responsibilities for different student populations are presented in Table 6 (Q15, Q18, Q17). Despite the volume of information in Table 6, I believe it is important to be able to present each of the pairings of student populations in caseload and time with the advisors' responsibilities to see a holistic view of the relationships between the variables. This allows readers to compare caseload and time for any grouping as well as compare the different advising responsibilities. For instance, it is helpful to see that Aboriginal students in caseload and time are the only populations that are statistically related to the advising responsibility of recruitment.

Table 6

Time Allocated to Each Advising Task Correlated with Caseload and Time for Each Student Population

	Advising Responsibility								
	Course Selection	General Inquires	Academic Standing	Personal Counselling	New Student Orientation	Recruitment	Career Planning	Event Planning	Academic Misconduct
With Disabilities									
Caseload	-.016	-.003	-.080	-.039	-.060	.054	.269*	.089	.027
Time	-.047	-.031	-.082	.057	-.070	-.075	.022	.103	.005
Aboriginal									
Caseload	.046	-.187	-.091	.057	.102	.513***	.030	.150	-.209
Time	.044	-.159	-.047	.064	-.053	.479**	.014	.182	.074
First-Generation									
Caseload	-.096	.004	-.014	.500***	.019	-.156	.278*	-.024	-.051
Time	-.103	.144	.112	.480***	-.022	-.085	.079	.062	.033
Mature									
Caseload	.150	.038	.078	-.149	.248*	.200	.096	.175	-.288*
Time	.153	.046	-.027	-.098	.257*	.188	-.015	.270*	-.057
Transfer									
Caseload	-.052	-.001	.160	-.184	.152	.113	-.147	.067	-.097
Time	.048	-.027	.100	-.110	.116	.206	-.272	.145	-.217
International									
Caseload	-.040	-.123	.059	.040	.172	-.112	.140	.168	.218
Time	-.074	-.228*	.097	-.048	.160	-.084	.348**	.110	.111
Athletes									
Caseload	-.007	-.123	.096	-.019	-.046	.088	.344*	.251	-.057
Time	.043	-.133	.300*	.027	-.146	.153	.143	.391**	.142
Academically Struggling									
Caseload	-.132	-.175	.518***	-.081	-.092	-.198	-.132	-.144	.220
Time	-.151	-.166	.502***	-.043	-.068	-.272*	-.176	-.209	.249
Regular Undergraduate									
Caseload	.172	.270*	-.126	.048	-.200	-.172	-.143	.017	.032
Time	.255*	.301**	.033	.232	-.259*	-.181	.081	.019	-.012
Regular Graduate									
Caseload	-.071	-.223	.038	.278	.321*	.177	.007	.103	.261
Time	.008	-.237	.143	.244	.392*	.326	.078	.203	.392*

* $p < .05$. ** $p < .01$. *** $p < .001$, which may or may not be $< .0002778$ (the Bonferroni correction associated with an overall alpha level of .05 for 180 correlations).

The number of correlations in Table 6 (180) raises a concern about the potential for Type I errors. Typically Education research sets an alpha level of .05 to indicate statistical significance (as used elsewhere in this thesis). Many scholars suggest that the desired alpha level should be adopted for the overall “family of tests” or each major hypothesis rather than for each individual statistical test (Hancock & Mueller, 2010). For example, a simplified procedure for calculating the popular Bonferroni correction involves dividing the overall desired alpha level by the number of individual tests performed (Williams, 1995). In this instance, the Bonferroni correction involves dividing the overall alpha of .05 by 180 comparisons to produce an alpha level of .0002778 for each individual test. Unfortunately, SPSS does not report the necessary level of precision, providing only three decimal places, to identify the individual correlations that meet this corrected alpha level. Given that the Bonferroni correction is known as a particularly conservative approach that may be too stringent and therefore overly susceptible to Type II errors (Perneger, 1998), I have adopted a compromise position to draw attention to the five correlations with $p < .001$, all of which are marked with triple asterisks in Table 6. I do not know whether these correlations satisfy the requirements of the corrected alpha level of .0002778, but they do seem worthy of note as potential areas to investigate in subsequent research. Due to the uncertainty about Type I and II errors, these correlations must all be interpreted with caution.

As indicated in Chapter Two, special student populations can be divided into three different categories: demographic characteristics over which a student has no control, situational characteristics, and labels that are based upon students’ outcomes. The

following investigation of caseload and time spent with special student populations and advising responsibilities use Pearson product-moment correlations (Q15, Q18, Q17).

Students with disabilities, Aboriginal students, and first-generation students all fall under the category of demographics over which a student has no control. The current study offered evidence of a positive relationship between caseload of Aboriginal students and recruitment tasks ($r = .513, p < .001$); a similar relationship was found for time spent with Aboriginal students and recruitment tasks ($r = .479, p = .001$). Caseload of first-generation students was positively correlated with the amount of time spent on personal counselling advising responsibilities ($r = .500, p < .001$). A statistically significant relationship was also found between time spent with first-generation students and time spent on personal counselling tasks ($r = .480, p < .001$). A smaller positive correlation was also found between first-generation caseload and time spent on career planning tasks ($r = .278, p = .044$) and between career planning and caseload of students with disabilities ($r = .269, p = .036$). No statistically significant correlations were found between time spent with first-generation students or students with disabilities and career planning tasks.

Mature students, transfer credit students, international students, and student athletes all fall under the category of situational characteristics as students make choices to enter into the system with knowledge of these characteristics. Mature student caseload ($r = .248, p = .041$) and time ($r = .257, p = .029$) correlated positively with new student orientation tasks. Mature students may require assistance during orientation that is more geared towards their needs than those of a student entering university straight from high school. More time with international students was seen to positively correlate with more

time on career planning tasks ($r = .348, p = .004$), which may indicate increased need for support in the career services area that is tailored to international students. Caseload of international students did not, however, have any significant correlation with time spent on career planning. Time spent with student athletes was found to correlate with event planning tasks ($r = .391, p = .004$) as well as academic standing responsibilities ($r = .300, p = .017$). Correlations between time with student athletes and time for event planning may be due to advisors' need to work with faculty, coaches, and student athletes to develop accommodations or alternate arrangements when students need to miss academic activities in order to attend sporting events. Positive correlations between time with student athletes and time for academic standing responsibilities may be a result of students needing advice about academic standing requirements to maintain athlete status.

Students who are struggling academically gain this label based upon outcomes that arise after they have entered into the system. This category includes students on probation, those seeking to be re-instated, and those who are dismissed from the university. Not surprisingly, caseload ($r = .518, p < .001$) and time ($r = .502, p = .004$) were correlated with academic standing tasks (e.g., probation, dismissal, and reinstatement). Time allocated to students struggling academically was negatively related to time allocated to recruitment tasks ($r = -.272, p = .022$). No other significant correlations were found between specific advisement tasks that occur on campus and caseload or time with students struggling academically.

Overall, the evidence shows that advisors spent a proportionate amount of time with special student populations and, therefore, the Pareto Principle did not apply.

However, the evidence also shows that the time allocated to different advisement tasks varied somewhat across student populations.

Summary

In this chapter, based on my research questions, I presented descriptive and inferential statistics regarding academic advisors, advisement, and time and caseload allocation across student populations. Results show that the Pareto Principle does not seem to apply to time allocation for academic advisors. Chapter Five will provide a discussion of the results, implications for practice, recommendations for further research, and conclusions.

CHAPTER FIVE: DISCUSSION, IMPLICATIONS FOR PRACTICE, FUTURE RESEARCH, CONCLUSIONS

The results of this study help establish a base level of knowledge that did not exist previously in Canadian literature or in practice. The following discussion will be presented with respect to the three research questions. Implications for practice will be provided as will suggestions for future research to replicate and extend this work. I conclude with a plea for continued research in the field of academic advisement.

Discussion

The survey response rate of 41% was respectable; factors that may have contributed positively to the response rate were advance notification and the reminder, the simplicity of the electronic questionnaire, and general interest from the participants to contribute to research in the field. A factor that may have inhibited higher response rates may have been the security issues with the electronic survey link that may have deterred some participants. The discussion is based around the three analysis sections from Chapter Four, which were guided by the research questions. Further clarification will be provided regarding who academic advisors are at Ontario universities, including basic demographic and job demographic results. The discussion will then elaborate on how Ontario universities structure the work of academic advisors, focusing on institutional size, caseload, perceptions of caseload, advising responsibilities, and what advisors would do to improve advising at their institutions. Lastly, the discussion will account for the results revealed regarding caseload and time allocation for different student populations.

Who are Academic Advisors at Ontario Universities?

Not surprisingly, females accounted for a high percentage of respondents (82%). Historically, as noted in the literature review (Nidiffer, 2000), nonacademic positions devoted to advising were predominantly managed by females. Over a century later, the results from this study confirm that little has changed; females still dominate the administrative education sector. When looking at gross annual income, I initially assumed that the variance of lower income brackets might be affected by those advisors who work part time. Upon further statistical analysis, I discovered that part-time workers' mean income was in the \$40,000-\$49,999 range and therefore, the status seemed to have little relationship to income. I was correct in my assumption that participants earning \$100,000 or above would probably hold positions at higher managerial or administrative levels where higher earnings would be expected. Additional analysis revealed that 9 of the 13 participants with salaries above \$100,000 were faculty advisors or department chairs.

For the purpose of this study, the definition used for academic advisor was a "representative giving insight or direction to a university student about an academic, social or personal matter" (Kuhn, 2008, p. 3). Therefore, a whole host of position titles could involve relevant aspects of advisement roles and I imagine this is what partially led to such a high percentage of respondents answering "other" to the question regarding their title at their institutions (23%). Over half of respondents (61%) did not have training when they became advisors. Pardee (2004) suggests lack of training in personal student development or social aspects may affect students' development. Brown (2008) clarifies that the lack of training weakens the quality and effectiveness of academic advising.

Attention needs to be heightened with regard to the necessity of increased training and consistency of training for academic advisors.

Access to professional-development resources yielded positive results with 86% of participants responding that they have access. The continued success of associations such as NACADA that focus on professional-development training and resources are a testament to the critical nature of and demand for professional development (Beatty, 1991). The Ontario academic advising group's mission statement also reinforces the promotion of quality professional development as being of key importance to positive outcomes for students (Mission Statement, 2009). Maintaining or strengthening professional-development resources would show signs for increased accountability and growth of such an important position. Answers were varied when asked how long respondents had been an advisor, which is encouraging because it suggests there are both novice and veteran advisors that hopefully can learn from one another and that a holistic transfer of knowledge can take place. This also means there are clear succession opportunities within the field.

How do Ontario Universities Structure the Work of Academic Advisors?

A good distribution of respondents from small (30%), midsize (37%), and large (33%) institutions was evident. However, since I did not ask participants to identify their institution, this led to the challenge of not knowing how many respondents were from any one institution or how many institutions were represented in the final data set. Therefore, I was not able to draw specific conclusions about institutions of a particular size.

Results from respondents revealed an almost equal distribution between decentralized (45%) and shared advising services (43%), with only 12% of respondents

working at institutions that were using fully centralized advising services (Q12). These results are inconsistent with U.S. statistics from 2003, which involved 14% using a decentralized model, 55% using a shared model, and 32% using a centralized model (Habley, 2004, as cited in Pardee, 2004). The most popular advising structure reported by respondents was decentralized (at 45%), which is much higher than statistics from U.S. institutions (14%). Unlike in the U.S., “undecided majors” are relatively uncommon in Ontario and, therefore, an advising structure tailored to the students’ home Faculties may be possible even for new incoming students in Ontario. As clarified by Gordon and Habley (2000) and Pardee (2004), Faculty-only models are a subsection of decentralized advising and may be popular due to cost effectiveness because funding and space requirements are addressed by the Faculties. Respondents were also quite likely to report shared advising models (43%), which is much closer to the U.S. statistics (55%), possibly due to the collaboration of both professional and Faculty advisors, which ensures students’ needs are met at a variety of levels (King, 2008). Only 12% of the Ontario respondents listed fully centralized advising services for their advising structure at their institution, whereas in the U.S. 32% of advising structures are centralized (Habley, 2004, as cited in Pardee, 2004). The very reason that decentralized advising structures may be popular in Ontario may decrease the appeal of centralized advising structures as students generally apply for direct entry into specific programs rather than general programs or “un-decided majors” and therefore decentralized advising structures would seem to be well suited to the student population in Ontario.

Institution size does seem to be related to advising structure (Q11

Condensed/Q12). Respondents from small institutions frequently reported centralized

advising structures (38%), whereas no respondents from midsize institutions reported centralized advising structures and only a small number of respondents from large institutions (4%) reported centralized advising structures. The prevalence of centralized advising structures in smaller institutions may be explained by a central point of contact for students at smaller institutions to handle all administrative tasks. Results showed a balance between decentralized and shared advising structures for the majority of respondents from midsize and large universities. Larger institutions may demand more advising targeted toward Faculty- or Department-specific needs rather than common policies and practices for university advising as a whole.

It was unfortunate that Ontario caseloads seemed disproportionately high, with 76% of Ontario advisors above the acceptable rate of 300 students as indicated in the published literature (Habley, 2004) (Q14 Condensed). In fact, 45% of the respondents had caseloads above 900, the upper limit that I had included in the questionnaire; these caseloads are over three times the recommended caseload (Q14). Whitner and Myers (1986) remarked it is not uncommon for academic advisors to be overworked. Furthermore, Habley's (2004) published standards suggest that the number of advisees should be reduced below 300 if advisors have special student populations in their caseload. Results from the questionnaire revealed that there was only one respondent who listed 100% of caseload dedicated to regular undergraduate students without any special populations included (Q15). Both regular undergraduate and special student populations may be assigned to advisors because their duties are not well defined. Clearly, attention and resources need to be devoted to reducing caseloads for academic advisors in Ontario universities.

It was not difficult to foresee that the greatest number of advisors would feel that their caseload involved too many students. This may be due to the fact that advisors are not able to provide the level of service they feel is necessary because their caseload is too overwhelming. Notably, 44% of respondents felt their current caseload reflected “the right number of students,” suggesting that in spite of large caseloads, many advisors were finding their caseloads manageable. Advisors with caseloads below 300 students were likely to feel their caseload was “just right” whereas advisors with caseloads at or above 300 students were likely to feel they had “too many” students.

Regarding feelings toward caseload, not surprisingly, the results illustrated a positive correlation between advising caseload and perception of advising allotment, suggesting that advisors felt they had too many students if their caseload was higher, which is also reflected in the answers regarding ways to improve advising. When the survey was released it was at a time when advisors may have been trying to manage multiple tasks as the semester was coming to an end. Advisors responding may have been more susceptible to stress and feeling like they had too many students in their caseload due to wrapping up the school year, increased academic standing concerns to handle, study skills preparation, and registration for summer courses. In contrast, advisors may have found caseloads more reasonable because the semester was coming to an end and a break from higher caseloads was imminent.

I was surprised that institution size did not play a greater role in relationship to other variables such as number of students in an advisors’ caseload, perception of caseload, or length of advising meetings. There is a common stereotype that larger institutions have less time for students, and students are treated as “just a number;”

however, there were no significant correlations between institution size and caseload, perception of caseload, or length of advising meetings. Existing literature did not focus on institution size and advisor-to-student ratios; my assumption was based on anecdotal evidence. The frequencies show fairly equal distribution of actual caseloads for advisors from both small and midsize universities. Respondents from larger universities tended to have smaller or larger caseloads rather than midsize caseloads. It is possible that the differential caseloads for respondents from large institutions could reflect differences across programs: for example, there may be smaller caseloads for professional programs and larger caseloads for bigger general programs, but confidentiality provisions prevented me from collecting such fine-grained data. Responses were fairly equally distributed for respondents from all institution sizes in relation to perception of caseload and length of advising meetings.

I also questioned whether or not caseload was related to length of advising meetings and no significant differences were found. This may be a result of a large volume of students with questions that do not require extensive time or counselling. Chi-square analysis also revealed no difference between length of advising meeting and advisors' perceptions of their caseloads.

Information regarding academic advising responsibilities may be valuable to many advisors across Ontario to gauge their responsibilities against a provincial assessment. It is important for academic advisors to understand their responsibilities as they often have a profound effect on students' academic careers and levels of satisfaction with the institution (Nutt, 2000). Self (2008) refers to advisors' duties as focusing on activities that promote student development and success. Advisors may not be able to

focus on student development and success if their responsibilities are out of line with the purpose of advising. Not surprisingly, course selection and registration tasks account for a large portion of their responsibilities; general inquiries and managing academic standing issues are also significant tasks. These tasks are all essential elements to academic advising positions.

A positive relationship was found between institution size and communication with other advisors on campus, which suggests that advisors employed by larger institutions are more likely to meet with other advisors on campus. This could be a result of having a greater number of advisors to begin with and, therefore, it would be easier to meet with other advisors on campus. This could also be the result of needing to meet more regularly to clear communication across multiple departments. Academic advisors from smaller institutions were less likely to meet with other advisors on campus and this may be a result of fewer advisors as student populations are not large enough to warrant multiple advisors.

I also investigated frequency of communication with other advisors on campus and advising structure. Those who reported working in centralized advising structures had the most frequent contact with other advisors, which is logical as advisors would all work out of one centralized location. Decentralized structures may only meet monthly to discuss issues that affect the university as a whole rather than Faculty- or department-specific advising issues. Shared advising structures by nature involve a combination of centralized and decentralized advising structures and, therefore, it was not surprising to see considerable variability in the frequency of meetings with other advisors.

The final item in the questionnaire asked the participants to rank from a selected listing what they would do to improve the advising system at their institution. With the large caseloads, it was easy to anticipate that “increasing the number of advisors” would rank highly. Increasing the number of advisors proved to be the number one strategy to improve advising at institutions. As Charlie Nutt (2010) remarked at a recent provincial conference, “you’re not likely to be in advising for the money, and if you are, you’re in the wrong profession.” My findings were consistent with this perception as the least important factor to advisors in improving the advising at their institution was an “increase in pay.” Limited concern with salary may be attributed to Ontario advisors’ care and concern being focused on their students and, therefore, their priorities for improvement involved increasing resources that would better allow them to provide a superior level of service. However, my findings were inconsistent with Donnelly’s (2009) findings involving U.S. advisors who were asked “what could be done to make your job more satisfying?” Overwhelmingly, these U.S. advisors reported that “more money” was critical to increasing their satisfaction.

How do Academic Advisors Apportion Their Time Across Student Populations?

Results revealed that the Pareto Principle was not applicable in terms of academic advisors’ allocation of time. The findings do not necessarily mean that special student populations do not consume a significant portion of advisors’ time, but they do suggest that there are other factors that may need to be taken into consideration. Results did not support my initial assumption that 80% of advisors’ time would be taken up with 20% of the special student population. The Pareto Principle may not have applied due to the existence at some institutions of specialized offices to handle some tasks relevant to

specialized student populations (e.g., offices dedicated to transfer credit determinations, Aboriginal students, and students with disabilities) rather than allocating all these tasks to individual academic advisors. In addition, unless a student openly identifies as part of a special student population, an advisor may not be able to detect the special grouping and assume the student is part of the regular undergraduate student population. It is important to note, however, that the limited evaluation and measurement data regarding academic advising means that further research is necessary to tease out the generalizability of the findings from this single study. The large number of correlations that I performed in this study to compare caseload and time with student populations to the various advisement responsibilities are subject to a potentially high level of Type I error and must be interpreted cautiously.

Duration of advising meetings and time spent with students with disabilities was found to be correlated. This may be due to advisors spending time with students to help identify that there may be a disability that the student is not aware of and refer to disabilities services. This extra time in meetings may also be due to the level of special accommodation that may need to occur to ensure equality for the students with disabilities as this student population's needs are very different from those of other student populations.

The results revealed that the distribution of time was roughly equal to the portion of the caseload, which would suggest that academic advisors may benefit from new strategies to work with the regular undergraduate population as this group accounts for the highest percentage of their caseload and time. The following discussion emphasizes potentially noteworthy correlations between caseload or time spent with specific student

populations with time allocated to different advising responsibilities. Caseload and time spent with regular undergraduate students were both positively correlated with the task of general inquiries. Predominantly, regular students are seeking assistance from academic advisors with general guidance rather than more in-depth assistance in personal counselling, career planning, course registration, and other tasks generally under the arch of advising. As O'Heron (1997) reports, 70% of students move directly from high school to university. The vast majority of students currently in university could be classified as members of the Net Generation who McGlynn (2005) characterizes as generally wanting immediate gratification and being extremely technologically savvy. Carlson (2005) further argues that these students only want to learn what they have to learn. These generational traits are in line with increased need for quick, concise information such as general inquiries that are immediate and to the point rather than more in-depth assistance that would typically involve longer, face-to-face interactions rather than short technologically mediated queries.

The Council of Ontario Universities (2009) reported that 4% of students in Ontario universities have disabilities; participants of this study reported that students with disabilities account for 7% of their advisement caseloads. Caseload of students with disabilities was found to positively correlate with career planning tasks, which may be a result of the population needing guidance finding careers that can accommodate their disabilities. These specific inquiries may be directed to a disabilities office or career office and therefore may not take up much time from the academic advisor. As reported in the literature review, Aboriginal students account for 1.5% of the Ontario university student population (COU, 2009); however, the participants reported an average of 5%

Aboriginal students in their caseloads. Both caseload and time spent with Aboriginal students were found to relate to more time spent on recruitment tasks. This may be as a result of government initiatives to increase the entry of Aboriginal students into postsecondary education.

COU (2009) found that 12% of Ontario university students are first-generation students and this study found 15% of respondents' caseloads involved first-generation students. Interestingly, only 12% of advisors' time was spent with this population. This finding suggests that first-generation students to a lesser degree weigh on advisors' time. However both caseload and time spent with first-generation students were linked with more time spent on personal counselling advising responsibilities. Riehl (1994) notes that parents of first-generation students do not have the experience to guide, prepare, or assist with what will be expected. This may lead these students to seek assistance from academic advisors in the form of personal counseling. Increased time on career-planning responsibilities was also correlated with first-generation student advisement caseload but not time spent, which could mean that a higher volume of first-generation students are seeking advice regarding employment options but these inquiries do not require much time.

Advisors who reported higher caseloads or time with mature students also reported spending more time on new student orientation. As stated in the literature review, university environments often cater to traditionally aged students ranging from 18-22 years of age. Researchers have highlighted that most university activities and services such as orientation, student support services, extra-curricular activities, and residence are tailored to traditionally aged students (Mancuso, 2001; Peck & Varney

2009). With many adults returning to education, a closer examination is occurring of what universities need to do to meet the needs of mature students. Many institutions have implemented orientation activities specific to mature students. This increased focus may account for higher caseloads and time devoted to preparing and implementing orientation activities for mature students.

More time with international students was positively related to more time on career planning tasks, which could potentially be because the career possibilities that international students are interested in may be more globally diverse or there may be additional constraints with work permits. Results revealed that 9% of advisors' caseloads involved international students compared to statistics that suggest 7% of the total university population in Ontario is international students (COU, 2009). Correlation analysis revealed a positive relationship between student athletes and time spent on event planning tasks. Advisors may be required to arrange alternative dates for examinations or assignments for student athletes to accommodate competitive sporting schedules, which can be a time-consuming process. In addition, the proportion of caseload involving student athletes correlated positively with time spent on academic standing issues. Often, student athletes are required to maintain a certain average to remain involved in varsity athletics so advisors may be spending more time with these students working out plans to ensure success.

Students' struggling academically accounted for the second largest allocation of advisors' time (24%). Advisement responsibilities typically increase with students struggling academically during peak times, including the start of a term, before the end of a term, and subsequently when academic standing is released. Not surprisingly, caseload

and time with students struggling academically were significantly correlated to the task of academic standing, since academic standing is the key issue that identifies students who are struggling academically. There are many different aspects to assisting students to get back on track, which can be caseload and time intensive, such as mandatory meetings with students having academic difficulties. These meetings generally involve a significant portion of advisors' time as they meet with each student, often individually, and review all aspects of why the student is in academic peril. Preparing success plans with students involves getting to the root of why a student is not excelling academically and these tasks can be very time consuming. Recruitment tasks may have been negatively correlated with students struggling academically as a population because recruitment is the only task that would generally involve advisors leaving campus, which they are likely too busy to do if they have high numbers of students struggling academically. Furthermore, recruitment is a task focused upon attracting potential new students not addressing concerns that arise for students who are already admitted.

Implications for Practice

As a result of this study, academic advisors in Ontario universities will be able to review the results and use them as a basis for comparison. On a personal level, there are multiple ways that advisors can benefit from this research, such as greater awareness of educational attainment, professional development, meetings with other advisors, and common advising responsibilities. Institutions can begin to provide training to all new advisors and look at evaluation methods currently in place to assess the effectiveness of the current program or structure, especially based on caseload and advising structure. Degree programs in Ontario focusing on the student service field in higher education

should be developed to open pathways to advising as a profession and standardized advisor training and knowledge base. Advisors' awareness of time allocation to student groups can help focus attention where new strategies are needed to maximize time and efforts.

There is unity in numbers and advisors' awareness of the results can help them to place themselves in relationship to other advisors in Ontario universities. Advisors with a bachelor's degree may see that 30% of advisors have a master's degree and decide it would be beneficial to pursue the next level of education. Advisors who do not have access to any professional-development activities (13%) may be able to persuade higher management to include professional-development activities as 86% of their advising colleagues at Ontario universities already receive this benefit. Advisors who are currently not meeting regularly with other advisors on campus (16% annually and 15% less than once per year) may want to try to create opportunities for additional meetings so that they increase their level of support and awareness of other advising activities on campus. Practice could be better improved based on the results regarding advisors' responsibilities. For instance, advisors who spend considerable time on academic misconduct tasks can see from the results that this is not a common advising task and, therefore, may not be appropriate to reside within the advising structure.

There is little opportunity to receive specialized training or education in academic advising in Canada. Only recently has the education sector started to offer specialized degrees in the student service field for higher education. Over half of advisors did not receive any training when they became advisors (61%). Institutions may want to consider providing training to new advisors. Clear educational routes that lead to student services

positions including academic advising should have standardized training and qualifications to become an advisor. As well, requirements for advisors to receive a certain level of training each year could be implemented so that all advisors are up to date with current practices in their field and can increase their opportunities for collaboration.

Advisors and institutions should really be looking at the effectiveness of advising. Significant caseloads of over 900 students in an advisors' caseload should be addressed as it leads to the question: how effective can an advisor be for 900 students? The number one response to improving advising structures as cited by advisors was to increase the numbers of advisors. Institutions need to critically examine their advising structure and assess if it is operating at an optimal level. Increasing the number of advisors could in turn increase the effectiveness of advising practices for more students as there would be smaller caseloads and more personalized attention for students. Even assessing the structure itself may be beneficial. For example, a large institution that is utilizing a centralized advising structure could benefit from being aware that typically in Ontario only smaller universities have centralized advising. The larger institutions may see that respondents that worked in larger institutions often reported decentralized or shared operations and therefore may want to investigate whether decentralized or shared advising structures would suit their needs better than centralized advising structures.

Results revealed that time spent with certain student populations was roughly equal to the portion of the caseload. Since regular undergraduate students accounted for the largest portion of any student population, advisors may benefit from new strategies to work with this population. General inquiries were closely related to advisors' time spent with regular undergraduate students; information of a general nature may not be readily

accessible to students and, therefore, these students are seeking advice from advisors. Creating lists of frequently asked questions and ensuring the answers are accessible to students may be one strategy to ensure that students have access to the general information they need. Using internet and new media formats might be particularly well suited for this Net Generation (McGlynn, 2005).

Of all student populations, in both caseload and time spent, students struggling academically were the second highest in caseload and time spent for academic advisors. New strategies may be needed to reduce the workload for advisors dealing with a large number of students from this population. Before peak times occur, advisors may want to set up exam preparation sessions and make their students who are struggling aware of the resources available to help them before it gets too close to the end of the semester. Individual student meetings regarding academic standing for students struggling academically can be very repetitive and time consuming. Developing group sessions may be a more beneficial way to maximize time when presenting general information about time management and general institutional policies of academic standing.

Future Research

Future research can be categorized into three areas: changes to the questionnaire, replication, and evaluation. After the completion of the questionnaire, there were a few comments from participants regarding the format of the questionnaire that would have proven valuable had these issues been recognized and remedied before the distribution of the questionnaire. The replication of this questionnaire is important to gain greater awareness about advisors working in the field both institutionally and nationally. The

lack of evaluation in this field has served to inhibit its progress; therefore, methods of evaluation should be targeted as key areas for growth in the field of advisement.

Recommended Changes to the Questionnaire

To build on this research, future researchers may want to consider the feedback gained from participants about this questionnaire and make minor changes to the questionnaire itself. Despite pilot testing the questionnaire, there were a few aspects missed that could have strengthened the questionnaire. A few participants from the study informally sent me emails regarding the question format for the questionnaire. The last question was a ranking of pre-defined options of ways to improve advising in their institution. There were complaints from a few participants that indicated they would rather have had the option to write in what their thoughts were about improving their system than being mandated to choose from a pre-determined list. Similarly, some participants indicated that they would have preferred to have an open-ended comments box at the end of the questionnaire to provide comments about the questionnaire or advising at their institution. Adding a qualitative component to the questionnaire to create a mixed-methods study would be particularly fruitful for subsequent research.

One of the questions on the electronic questionnaire asked participants to clarify what percentage of their caseload was comprised of certain student populations. Another question asked the respondents to further clarify time spent with these student populations. Both questions listed pre-defined student populations from which the participant could choose, and included a spot to enter in other student groups not addressed by the pre-defined options. I used these questions to gather information regarding the ways that advisors apportioned their time as a test of the Pareto Principle. It

seems that most advisors do not readily track information on their caseload or time spent with student populations and, therefore, there were likely many people approximating the caseload or time used and some participants commented that they did not feel comfortable approximating and thus, did not want to answer the question. As a result, it may have been more useful to have provided further clarification on those questions or to have an option for participants to opt out of answering those questions.

After the questionnaire link had closed, I also had one person ask why I had not included English as a Second Language or Immigrants to Canada as a special student population as these students can often be part of an advisor's caseload and time allocation. Unfortunately, this was just an oversight that neither I nor the pilot reviewers had recognized. In addition, it would be helpful to know how much time advisors spend on transfer credit assessments and degree audits for graduation or progression to gain further insight about time allocation. Implementing this suggestion for further studies would make the questionnaire more comprehensive and inclusive of special student populations.

If I re-drafted the questionnaire, I would also include a question about how the advisors felt about the number and time allocated to administrative tasks in relation to actual advising in their position, as I feel this is a common concern for many advisors and could provide an interesting addition to the questionnaire. I would also consider adding a question regarding the amount or type of evaluation. Without having evaluation measures in place, it is difficult to measure success of the work advisors do. In addition, I would ask advisors who they report to as often there is not a person that manages the advising team as a whole, especially for advisors in decentralized or shared advising structures.

Implementing these suggestions would alleviate some of the concerns from participants and strengthen the questionnaire as a whole.

Replication of the Study

It is evident from the results of this study that more research is needed to succinctly define the role of academic advisors in Ontario universities. I believe it would be very valuable if each institution in Ontario could use this or a similar questionnaire to review advisement practices at their own institution. Taking the time to critically review the existing system and make sure the values and objectives of the institution are aligned with the advising practices is vital. I began this thesis as a result of doing an in-depth review of the advising services at my own institution and the valuable information the results revealed to our advising team helped our institution to sort through the different practices within each Faculty and become more efficient as a result. Simply being more aware of what is happening at an individual institution can be very helpful to monitor challenges and successes. Advising teams that are shared or decentralized would benefit from participating in internal advising reviews more so than centralized advising teams as they are spread out across the institution, whereas, centralized advising structures contained within one unit are guided by a central process.

Replicating this study nationwide could create unparalleled unity among advisors as, to date, there are no estimates as to how many advisors there are in Canada or the kinds of tasks for which they are responsible. Finding out this information, sharing best practices from institution to institution, and creating consistent job tasks could provide a level of standardization that would assist with the goal of professionalization. Nationwide

results could help to improve the level of recognition and credibility for academic advising.

Means of Evaluation

Without having any means to quantify the value of a service, it is difficult to gain support or recognition. Therefore, future research in the field of academic advising could benefit from an examination of evaluation and assessment tools for academic advising in Ontario for there are currently few means of evaluation or assessment. Evaluating advising structures and advisors can provide information as to the effectiveness (or lack thereof) of the structure and the advisors. Clear and consistent evaluation criteria should be developed that could be standardized across Ontario and the profession.

Conclusions

The aims of this thesis were to create a profile of academic advising in Ontario universities and lay the groundwork for creating a benchmark; I believe these aims have been achieved. Through an examination of people and practices involved in advising, I was able to obtain information never before gathered. This study employed a descriptive, electronic questionnaire that was distributed to individuals who provide university academic advising in varying capacities across Ontario.

Quantitative data from the questionnaire were analyzed using SPSS to describe generalized features of academic advising at Ontario universities. Numeric results helped to provide clear information about who academic advisors are, what academic advising structures exist in Ontario universities, and the nature of work with different student populations. Results revealed some aspects that are aligned with past research conducted in the U.S., whereas other results showed how different Ontario structures really are.

Most notably, the centralization of advising structures and levels of caseloads showed great differences between U.S. results and this study. Advising caseloads appear to be extraordinarily high in Ontario as opposed to the aforementioned acceptable rates in the U.S. Similarly, there were differences between the Council of Ontario Universities' (2009) statistics and the findings of this study. Contrary to expectations, I did not find that academic advisors' time was predominately spent dealing with special student populations; however, the questionnaire did allow advisors an opportunity to examine their time allocation, which could prompt better usage of time and development of strategies to maximize time.

The results confirmed how varied advising is across Ontario universities and it is evident that institutions encounter different academic advising challenges and that no one system will function effectively at all institutions. As mentioned, there is a need for the development of evaluation tools so that institutions can successfully measure their effectiveness and impact to the academic community. The measurement tool and process I developed can be extended across Canada to provide replication of this study at an institutional and national level to further create awareness of the current practices and to share best practices.

Perhaps the most valuable outcome of this study was the contribution that academic advisors made by participating in this research. This involvement has added to the richness of academic advising research by providing advisors a forum in which to share their experiences and perceptions of academic advising in their current institutions, and it highlighted the vital function that academic advisors serve within the academic community. Hopefully, this study will inspire interest in the field and propel other

members of the academic advising community at universities across Ontario to conduct and participate in research.

References

- Appleby, D. (2008). Advising as teaching and learning. In V. Gordon, W. Habley, & T. Grites (Eds.), *Academic advising: A comprehensive handbook* (pp. 85–102). San Francisco: Jossey-Bass.
- Association of Universities and Colleges of Canada (AUCC). (2007). *Trends in higher education: Volume 1 – Enrolment*. Ottawa, ON: Author. Retrieved July 31, 2010, from http://www.aucc.ca/_pdf/english/publications/trends_2007_vol1_e.pdf
- Barnes, B., & Austin, A. (2009). The role of doctoral advisors: a look at advising from the advisor's perspective. *Innovative Higher Education*, 33, 297–315.
- Beach, C., Boadway, R., & McInnis, M. (Eds.). (2005). *Higher education in Canada*. Kingston, ON: John Deutsch Institute for the Study of Economic Policy.
- Beatty, J. D. (1991). The National Academic Advising Association: A brief history. *NACADA Journal*, 11(1), 5–25.
- Brown, T. (2008). Critical concepts in advisor training and development. In V. Gordon, W. Habley, & T. Grites (Eds.), *Academic advising: A comprehensive handbook* (pp. 309–322). San Francisco: Jossey-Bass.
- Brubacher, J. S., & Rudy, W. (1976). *Higher education in transition: A history of American colleges and universities: 1636-1976*. New York: Harper & Row.
- Buchanan, E., & Hvizdak, E. (2009). Online survey tools: Ethical and methodological concerns of human research ethics committees. *Journal of Empirical Research on Human Research Ethics*, 4(2), 37–48.
- Canadian Federation of Students. (2005, February 7). *Bob Rae calls for higher tuition fees and higher student debt*. Media release.

- Carlson, S. (2005). The net generation in the classroom. *Chronicle of Higher Education*, 52(7), A34–A37.
- Carpenter, B. (2008). Connecting theories of what matters. *Board Leadership*, 95 .4,7.
- Castillo Clark, E., & Kalionzes, J. (2008). Advising students of colour and international students. In V. Gordon, W. Habley, & T. Grites (Eds.), *Academic advising: A comprehensive handbook* (pp. 204–225). San Francisco: Jossey-Bass.
- Charbonneau, L. (2005, March). Rae Report wins praise in Ontario. *University Affairs*. Retrieved November 28, 2009, from <http://www.universityaffairs.ca/rae-report-wins-praise-in-ontario.aspx>
- Charles, H., & Stewart, M. (1991). Academic advising of international students. *Journal of Multicultural Counseling & Development*, 19(4), 173–181.
- Collier, P., & Morgan, D. (2008). “Is that paper really due today?”: differences in first-generation and traditional college students’ understandings of faculty expectations. *Higher Education*, 55, 425–446.
- Constantineau, P. (2009). *The Ontario transfer credit system: A situation report* (COU No. 817). Toronto, ON: COU Academic Colleagues, Council of Ontario Universities.
- Council of Ontario Universities (COU). (2006). *Progress report: University access, accountability and quality in the Reaching Higher plan*. Toronto, ON: Author. Retrieved December 20, 2009, from <http://www.cou.on.ca/content/objects/ProgressReport-Final-%20Dec4061.pdf>

- Council of Ontario Universities (COU). (2008). *The right balance: Navigating present needs and future opportunities—2009 provincial pre-budget submission*. Toronto, ON: Author. Retrieved December 5, 2009, from, <http://www.cou.on.ca/content/objects/2009Pre-BudgetSubmission%20Full%20Document%20Jan09.pdf>
- Council of Ontario Universities (COU). (2009). *Biennial report. 2006/2008* (COU No. 808). Toronto, ON: Author. Retrieved December 20, 2009, from <http://www.cou.on.ca/content/objects/2006-08%20COU%20Biennial%20Report.pdf>
- Council of Ontario Universities (COU). (2010). *Common university data Ontario (CUDO)*. Toronto, ON: Author. Retrieved March 31, 2011, from <http://www.cou.on.ca/Statistics/CUDO.aspx>
- Creswell, J. W. (2005). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Crookston, B. (1972). A developmental view of academic advising as teaching. *Journal of College Student Personnel*, 13, 12–17.
- Donnelly, N. (2009). A national survey of academic-advisor job satisfaction. *NACADA Journal*, 29(1), 5–21.

- Fallis, G., & Rose, M. (2008). *The role of academic colleagues in the Council of Ontario Universities* (COU No. 805). Toronto, ON: COU Academic Colleagues, Council of Ontario Universities.
- Fogg, P. (2009). When generations collide. *Education Digest*, 74(6), 25–30.
- Frost, S. H. (2000). Historical and philosophical foundations for academic advising. In V. Gordon & W. Habley (Eds.), *Academic advising: A comprehensive handbook* (pp. 3–17). San Francisco: Jossey-Bass.
- Franklin, K., & Lowry, C. (2001). Computer-mediated focus group sessions: naturalistic inquiry in a networked environment. *Qualitative Research*, 1, 169–184.
- Gehrke, R. (2006). *Dynamics between the academic advisor and student on academic probation which lead to academic success*. Unpublished dissertation, University of Texas at Austin.
- Gordon, V. (1998). New horizons: Learning from the past and preparing for the future. *NACADA Journal*, 18(2), 5–12.
- Gordon, V., & Habley, W., (Eds). (2000). *Academic advising: A comprehensive handbook*. San Francisco, CA: Jossey-Bass.
- Griner Hill, L., Maucione, K., & Hood, B. (2007). A focused approach to assessing program fidelity. *Prevention Science Research*, 8, 25–34.
- Grites, T. (2004). Transfer students. *Academic Advising Today*, 27(3). Retrieved December 5, 2009, from http://www.nacada.ksu.edu/AAT/NW27_3.htm#16
- Habley, W. R. (2004). *Advisor load*. Retrieved December 10, 2009, from <http://www.nacada.ksu.edu/Clearinghouse/AdvisingIssues/advisorload.htm>
- Habley, W. R. (2009). Advising as inquiry. *NACADA Journal*, 29(2), 76–83.

- Hamilton, K. (2004). Creating a successful student-athlete. *Black Issues in Higher Education*, 21(4), 30–31.
- Hancock, G., & Mueller, R. O. (2010). *The reviewer's guide to quantitative methods in the social sciences*. New York, NY: Routledge.
- Hatton, A., Homer, S., & Park, L. (2009). *Creating bridges between institutions: A brief look at advisors' roles in transfer student transition*. Retrieved December 10, 2009, from <http://www.nacada.ksu.edu/Clearinghouse/M02/Transfer.htm>
- Hemphill, L. L. (2002). Advising students with disabilities. *The Academic Advising News*, 25(3). Retrieved December 12, 2009, from <http://www.nacada.ksu.edu/Clearinghouse/AdvisingIssues/disability.htm>
- Hendey, W. (1999). Developmental advising: a practical view. *The Mentor: An Academic Advising Journal*. Retrieved February 15, 2010, from <http://www.psu.edu/dus/mentor/990115wh.htm>
- Jones, G., & Young, S. (2004). "Madly off in all directions": higher education, marketisation and Canadian federalism. In P. Teixeira, B. Jongbloed, D. Dill, & A. Amaral (Eds.), *Markets in higher education: Rhetoric or reality?* (pp. 185–205). Norwell, MA: Kluwer Academic Publishers.
- Johnston, L. (2000). *Private universities in Ontario*. (Current Issue Paper 203). Toronto, ON: Ontario Legislative Library Research and Information Services.
- Juwah, C., Lal, D., & Belouci, A. (2008). *Overcoming the cultural issues associated with plagiarism for international students*. Retrieved November 30, 2009, from www.rgu.ac.uk/celt/learning/page.cfm?pge=31100

- Kasworm, C. (2010). Adult learners in a research university: negotiating undergraduate student identity. *Adult Education Quarterly*, 60(20), 143-160.
- Keeling, S. (2003). Advising the millennial generation. *NACADA Journal*, 23(1&2), 30–36.
- King, M. (2008). Organization of academic advising services. In V. Gordon, W. Habley, & T. Grites (Eds.), *Academic advising: A comprehensive handbook* (pp. 242–252). San Francisco: Jossey-Bass.
- Koch, R. (2001). *The 80/20 principle: The secret to achieving more with less*. London: Nicholas Brealey.
- Kuhn, T. (2008). Historical foundations of academic advising. In V. Gordon, W. Habley, & T. Grites (Eds.), *Academic advising: A comprehensive handbook* (pp. 3–35). San Francisco: Jossey-Bass.
- Laidler, D. (2005). Redirecting Rae: Some proposals for postsecondary education in Ontario. *C. D. Howe Institute Backgrounder*, 92.
- Light, R. J. (2001) *Making the most of college: Students speak their minds*. Cambridge: Harvard University Press.
- Lipovetsky, S. (2009). Pareto 80/20 law: Derivation via random partitioning. *International Journal of Mathematical Education in Science and Technology*, 40(2), 271–277.
- Logan, J. (2009). *Learning disabilities, a guide for faculty at Ontario universities* (COU No. 813). Toronto, ON: COU Academic Colleagues, Council of Ontario Universities.

- Mancuso, S. (2001). Adult-centered practices: benchmarking study in higher education. *Innovative Higher Education*, 25(3), 165–181.
- McGillin, V. (2000). Current issues in advising research. In V. Gordon & W. Habley (Eds.), *Academic advising: A comprehensive handbook* (pp. 374–375). San Francisco: Jossey-Bass.
- McGlynn, A. (2005). Teaching Millennials, Our newest cultural cohort. *Education Digest*, 71(4), 12–16.
- Mission Statement. (2009). Retrieved December 10, 2009, from www.ontarioadvising.webs.com
- Murray, D. M., & Fisher, J. D. (2002). The Internet: A virtually untapped tool for research. *Journal of Technology in Human Services*, 19, 5–18.
- National Survey of Student Engagement* [Data file]. (2008). Bloomington, IN: Indiana University Center for Postsecondary Research.
- Nidiffer, J. (2000). *Pioneering deans of women: More than wise and pious matrons*. New York: Teachers College, Columbia University.
- Nutt, C. (2000). One- to-one advising. In V. N. Gordon & W. H. Habley (Eds.), *Academic advising. A comprehensive handbook* (pp. 220–237). San Francisco: Jossey-Bass.
- Nutt, C. (2010, June). *Professionalization in the field of academic advising*. Keynote presented at the Ontario Academic Advising Conference, Oshawa ON.
- O'Banion, T. (1972). An academic advising model. *Junior College Journal*, 42(6), 62–69.
- O'Heron, H. (1997). Different students, different needs. *Research File*, 1(5).

- Ontario Confederation of University Faculty Associations (OCUFA). (2008). *University funding capital*. Retrieved November 20, 2009, from www.ocufa.on.ca/OCUFA/docs/issues/bn_capitalfunding_oct08.pdf
- Ontario University Athletics. (2009). Champions for Life. Retrieved July 31, 2010, from <http://oua.ca/student/champions>
- Pardee, C. F. (2004). *Organizational structures for advising*. Retrieved February 15, 2010, from http://www.nacada.ksu.edu/Clearinghouse/AdvisingIssues/org_models.htm
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students*. San Francisco, CA, Oxford: Jossey-Bass.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students, volume 2: A third decade of research*. San Francisco, CA: Jossey-Bass.
- Peck, L. G., & Varney, J. (2009). *Advising IS teaching: Providing adult learners with strategies for self-advocation*. Retrieved December 5, 2009, from <http://www.nacada.ksu.edu/Clearinghouse/M02/Adult-Learner.htm>
- Perneger, T. V. (1998). What's wrong with Bonferroni adjustments. *British Medical Journal*, 316(7139), 1236–1238.
- Peshkin, A. (1988). In search of subjectivity-one's own. *Educational Researcher*, 14, 17–22.
- Rae, B. (2005). *Ontario: A leader in learning: Report and recommendations*. Toronto: Queen's Printer for Ontario.
- Reiff, H. (1997). Academic advising: An approach from learning disabilities research. *Journal of Counseling & Development*, 75(6), 433–441.

- Riehl, R. J. (1994). The academic preparation, aspirations, and first-year performance of first generation students. *College and University*, 70(1), 14–19.
- Rudolph, F. (1962). *The American college and university: A history*. New York: Alfred A. Knopf.
- Schulenberg, J., & Lindhorst, M. (2008). Advising is advising: toward defining the practice and scholarship of academic advising. *NACADA Journal*, 28(1), 43–53.
- Self, C. (2008). Advising delivery: professional advisors, counselors, and other staff. In V. Gordon, W. Habley, & T. Grites (Eds.), *Academic advising: A comprehensive handbook* (pp. 267–278). San Francisco: Jossey-Bass.
- Sharpe, B., & Dianda, J. (2005). *Changes in student learning behaviours*. Toronto, ON: COU Academic Colleagues, Council of Ontario Universities.
- Skorupa, K. (2002). Adult learners as consumers. *The Academic Advising News*, 25(3). Retrieved December 5, 2009, from <http://www.nacada.ksu.edu/Clearinghouse/AdvisingIssues/adultlearners.htm>
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- Tuttle, K. (2000). Academic advising. *New Directions for Higher Education*, 111. San Francisco: Jossey-Bass.
- Veysey, L. R. (1965). *The emergence of the American university*. Chicago: University of Chicago Press.
- Whitner, P., & Myers, R. (1986). Academics and an athlete: A case study. *The Journal of Higher Education*, 57(6), 659–672. Retrieved December 10, 2009, from <http://www.jstor.org/stable/1981198>

- Williams, V. S. L. (1995, April). *Some advantages of controlling for false discoveries in multiple comparisons*. Paper presented at the American Educational Research Association annual conference, San Francisco. (ERIC Document Reproduction Service No. ED 3875 15)
- Winston, R., & Sandor, J. (1984). Developmental academic advising: what do students want? *NACADA Journal*, 4(1), 5–13.

Appendix A

The Ontario University Academic Advising Questionnaire

=====

Welcome

=====

Welcome and thank you for your interest in contributing.

I am a fellow academic advisor doing my Master of Education thesis with Brock University under the supervision of Dr. Michelle McGinn.

The purpose of this research is to learn more about academic advisement in Ontario universities. This questionnaire will cover three different main areas including: demographic information, institutional structures, and key advising responsibilities and issues. The questionnaire includes 20 questions and will take approximately 10 minutes to complete.

Completion of the questionnaire is voluntary and you have the right to withdraw at any point before the data are submitted. To ensure your anonymity, you will not be asked to provide any identifying information such as your name, email address, or institution. There are no foreseeable risks associated with completing this questionnaire.

I would like to assure you that this study has received clearance from Brock University's Research Ethics Board (file #09-216). However, the final decision about participation is yours. If your institution's policy requires that your REB review this project, please let me know and a submission will be forwarded. If you have any comments or concerns resulting from your participation in this study, please contact a Research Ethics Officer at 905-688-5550 x 3035 or reb@brocku.ca.

Your participation in answering the following questionnaire will serve as implied consent.

The final thesis will be available through the Brock University library system in Fall 2010. The results may also appear in conference or journal articles.

Thank you
Kerry Armstrong, Academic Advisor and student researcher.
kerry.armstrong@uoit.ca
905-721-8668 x2932

Michelle McGinn, Associate Professor, Faculty Supervisor, Brock University.
mcginn@brocku.ca 905-688-5550 x4730

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Advising Description

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For the purpose of this questionnaire, the general definition of an academic advisor is a representative giving insight or direction to a university student about an academic, social, or personal matter.

Description obtained from: Gordon, V., Habley, W., & Grites, T. (Eds.). (2008). Academic advising: A comprehensive handbook. San Francisco: Jossey-Bass.

=====

Personal Demographics

=====

1. Gender

- ☐ Male
- ☐ Female

2. Age

- ☐ Under 20
- ☐ 20 - 29
- ☐ 30 - 39
- ☐ 40 - 49
- ☐ 50 - 59
- ☐ 60 - 69
- ☐ 70 and over
- ☐ Decline to Respond

3. Race/Ethnicity

- ☐ Aboriginal
- ☐ Asian
- ☐ Black
- ☐ Caucasian
- ☐ Latino
- ☐ Other/Multi-Racial
- ☐ Decline to Respond

4. Current Annual Gross Income

- ☐ Under \$20,000
- ☐ \$20,000 - \$29,999
- ☐ \$30,000 - \$39,999
- ☐ \$40,000 - \$49,999
- ☐ \$50,000 - \$59,999
- ☐ \$60,000 - \$69,999
- ☐ \$70,000 - \$79,999
- ☐ \$80,000 - \$89,999
- ☐ \$90,000 - \$99,999
- ☐ \$100,000 and above
- ☐ Decline to Respond

5. As an advisor, do you work

- ☐ Full Time
- ☐ Part Time
- ☐ Other/Please Specify

6. Highest education level you have attained

- ☐ High School
- ☐ College
- ☐ Bachelor
- ☐ Postgraduate Diploma
- ☐ Master's
- ☐ Doctorate
- ☐ Other/Please Specify

7. Which of the following best describes your title at your institution?

- ☐ Academic Advisor
- ☐ Student Advisor
- ☐ Student Liaison
- ☐ Academic Counsellor
- ☐ Personal Counsellor
- ☐ Manager
- ☐ Program Coordinator
- ☐ Program Chair
- ☐ Department Chair
- ☐ Faculty Advisor (primary role teaching or research)
- ☐ Other/Please Specify

8. Did you receive any training when you became an advisor?

- ☐ Yes
- ☐ No

9. How long have you been an academic advisor?

- ☐ Less than 3 years
- ☐ 3-5 years
- ☐ 6-10 years
- ☐ 11-15 years
- ☐ More than 15 years
- ☐ Not Sure

10. Do you have access to any professional development activities such as conferences, membership fees, resource purchases etc.?

- ☐ Yes
- ☐ No

=====

Institutional Demographics

=====

11. Institutional Size (number of undergraduate students enrolled)

- ☐ Less than 2,500
- ☐ 2,500 - 4,999
- ☐ 5,000 - 9,999
- ☐ 10,000 - 19,999
- ☐ 20,000 - 29,999
- ☐ 30,000 - 39,999
- ☐ More than 40,000
- ☐ Not Sure

12. What is the advising structure at your institution?
- ☐ Decentralized (advising services provided by faculty/staff in academic departments)
 - ☐ Centralized (advising services provided by one central unit)
 - ☐ Shared (advising services centralized with additional faculty/staff in academic departments)
 - ☐ Other/Please specify
13. How often do you meet with other academic advisors on campus?
- ☐ Daily
 - ☐ Weekly
 - ☐ Monthly
 - ☐ Annually
 - ☐ Less than once per year
14. How many students are included in your advising case load?
- ☐ Under 150
 - ☐ 150-299
 - ☐ 300-449
 - ☐ 450-599
 - ☐ 600-749
 - ☐ 750-899
 - ☐ Over 900
 - ☐ Not Sure
15. What percentage of students from your advising case load fit into each of the following categories?
- ☐ Transfer Students
 - ☐ First-Generation Students
 - ☐ Mature Students
 - ☐ Student Athletes
 - ☐ Students with Disabilities
 - ☐ International Students
 - ☐ Academically Struggling Students (probationary, dismissal, re-instatement)
 - ☐ Aboriginal Students
 - ☐ Regular UNDERGRADUATE students NOT Addressed by the above Special Student Populations
 - ☐ Regular GRADUATE students NOT Addressed by the above Special Student Populations
 - ☐ Other/Please Specify

In electronic survey, percentage was automatically tallied and totaled at the bottom of the question.

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Advising

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16. What is the average length of your advising meetings (in minutes)?
- ☐ Less than 15 minutes
 - ☐ 15-29 minutes
 - ☐ 30-45 minutes
 - ☐ More than 45 minutes
 - ☐ Not Sure

17. In an average year, what percentage of your time is spent on the following advising responsibilities?

- ☐ Course Selection/Registration
- ☐ Academic Standing (Probation, dismissal, reinstatement)
- ☐ Event Planning
- ☐ Academic Misconduct
- ☐ Career Planning
- ☐ General Inquiries
- ☐ New Student Orientation
- ☐ Personal Counselling
- ☐ Recruitment
- ☐ Other/Please Specify

In electronic survey, percentage was automatically tallied and totaled at the bottom of the question.

18. What percentage of your TIME is spent with the following student populations?

- ☐ Transfer Students
- ☐ First-Generation Students
- ☐ Mature Students
- ☐ Student Athletes
- ☐ Students with Disabilities
- ☐ International Students
- ☐ Academically Struggling Students (probationary, dismissal, re-instatement)
- ☐ Aboriginal Students
- ☐ Regular UNDERGRADUATE Students NOT Addressed by the Above Special Student Populations
- ☐ Regular GRADUATE students NOT Addressed by the above Special Student Populations
- ☐ Other/Please Specify

In electronic survey, percentage was automatically tallied and totaled at the bottom of the question.

19. What is your assessment of your current advising case load?

- ☐ Too few students
- ☐ The right number of students
- ☐ Too many students
- ☐ Not Applicable

20. What would you do to improve the advising system at your institution?

(Please rank #1 being most important and #5 being least important)

- ☐ Increase Pay
- ☐ Increase number of advisors
- ☐ Increase support staff
- ☐ Increase technological resources
- ☐ Increase professional development training resources

=====

Thank You!

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Thank you for completing this questionnaire. Your response is very appreciated.

If you would like to obtain a summary of the final results please contact me at kerry.armstrong@uoit.ca

Rest assured, survey responses will remain anonymous; there will be no way to connect your email address or message to your survey responses.

Appendix B

Recruitment Flyer

ACADEMIC ADVISING EH!

Do you ever feel that your academic advising structures are different than in published research?

Do you ever wonder how advising structures in Ontario are similar or different?

A research study is being devised to answer these questions and more!

Ontario University Academic Advisors will be invited to participate in an upcoming academic research study in attempt to gather a snapshot of what academic advising is in Ontario Universities.

Watch your email for a brief anonymous electronic survey to be completed and be a part of building a benchmark for advising in Ontario.

Kerry Armstrong will be conducting this research as part of her thesis for her Master of Education with Brock University.

For additional information please contact:

Kerry Armstrong at Kerry.armstrong@uoit.ca

Brock Thesis Supervisor:

Dr. Michelle McGinn (mcginn@brocku.ca)

*Thank you in advance
for your interest and participation.*



Appendix C

Ethics Clearance

Office of Research Services
Research Ethics Office

St. Catharines, Ontario, Canada L2S 3A1
T: 905-688-5550, Ext. 3035/4876 F: 905-688-0748

www.brocku.ca

DATE: April 7, 2010

FROM: Ann-Marie DiBiasi, Acting Chair
Research Ethics Board (REB)

TO: Michelle McGinn, Education
Kerry Armstrong

FILE: 09-216 McGINN
Masters Thesis/Project

TITLE: Ontario University Academic Advising

The Brock University Research Ethics Board has reviewed the above research proposal.

DECISION: Accepted with notes

This project has received ethics clearance for the period of **April 7, 2010 to August 20, 2010** subject to full REB ratification at the Research Ethics Board's next scheduled meeting. The clearance period may be extended upon request. ***The study may now proceed.***

Notes:

- In the consent form, please indicate any intent to publish/present results.
- The final line of the questionnaire tells participants that they may obtain a summary of the final results by contacting the student investigator by email. You might consider explaining here that it will not be possible to link their email message to their questionnaire.

Please note that the Research Ethics Board (REB) requires that you adhere to the protocol as last reviewed and cleared by the REB. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written clearance from the REB. The Board must provide clearance for any modifications before they can be implemented. If you wish to modify your research project, please refer to <http://www.brocku.ca/researchservices/forms> to complete the appropriate form **Revision or Modification to an Ongoing Application**.

Adverse or unexpected events must be reported to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants and the continuation of the protocol.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research protocols.

The Tri-Council Policy Statement requires that ongoing research be monitored. A Final Report is required for all projects upon completion of the project. Researchers with projects lasting more than one year are required to submit a Continuing Review Report annually. The Office of Research Services will contact you when this form **Continuing Review/Final Report** is required.

Please quote your REB file number on all future correspondence.

AMD/sp